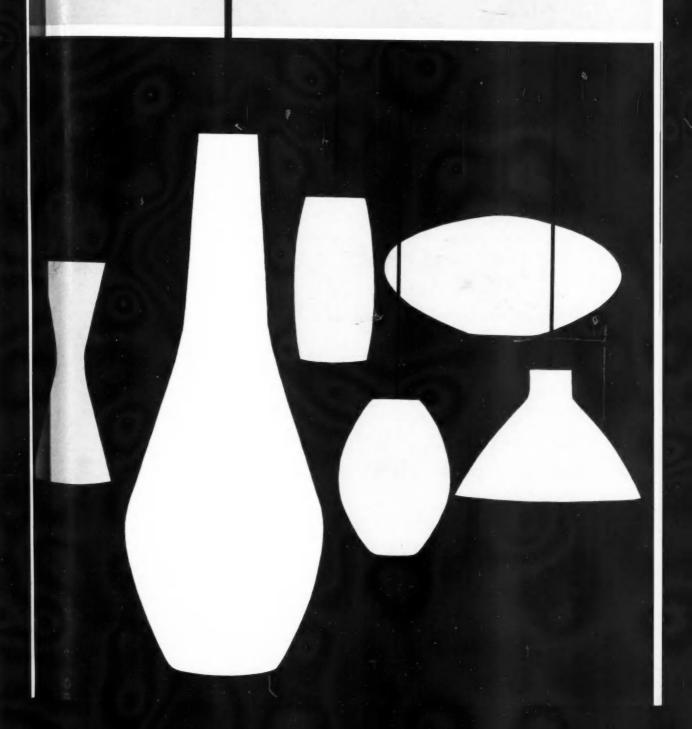
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THE DELPHIC ORACLE was first housed in a shrine made from beeswax and feathers, secondly in one of twisted fern stalks, thirdly in one of laurel boughs, fourthly in one of bronze and finally, finding none of these quite satisfactory, she resided in a building of dressed stone. Such palpable hesitation in finding the appropriate materials to house oracles would scarcely arise nowadays. The use of aluminium and its alloys in building provide the solution to many problems where strength, durability and resistance to weather are required; furthermore, beeswax and feathers are not all that lighter.

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# Comment

# Business and pleasure

THE CHAIRMAN of the Council of Industrial Design, W. J. Worboys, recently told a distinguished audience, principally composed of industrialists, that the aim of the Council is frankly commercial. This timely reminder comes at a moment when the Council's role as an ally of industry has taken on additional significance, and its influence is extending rapidly.

In the early days when the Council entered the lists the battle cry of 'fitness for purpose', which had already been raised, became and still remains an important plank in its policy. The efficiency of the technical and functional checks to which a product submitted for 'Design Review' is subjected has been continuously improved with the help of technical consultants, advisers from the trades concerned and other kindred organisations. Most firms now accept, at least in theory if not always in practice, that sound business depends on sound performance.

But though function is essential, it is not enough to sustain the demand for a product in the face of world competition. Design has become a strong selling point and wide ranges of goods now sell as much on their visual merit as on their standard of durability and function. From a commercial point of view pleasing looks cannot be relegated to the last place on the list of priorities and the Council's insistence on treating them as an essential aspect of good design does not run counter to its claim to a commercial bias.

It would be easy to be deterred by the difficulties; the lack of scientific measurement and finite boundaries, but to funk the problem is to ignore the obvious requirements of increasingly discriminating markets. Sales statistics and market research, which efficient manufacturers and retailers collect in the normal course of business and rightly regard as confidential, provide some pointers but their horizon is necessarily limited. The Council's task is to urge, day in and day out, the grading up of design standards; and by keeping in touch with significant trends it can help to raise the prestige of British goods and so create conditions favourable to those manufacturers who are prepared to seize opportunities.



# WHY USE FOREIGN GLASS?

JOHN E. BLAKE

The current practice among several

British lighting fittings manufacturers
of using foreign glass for their most
adventurous modern designs was the
subject of a recent enquiry carried out by
the author. The results of this enquiry
are discussed in the following article.

Few would deny that the lighting fittings industry has been one of the most adventurous in Great Britain since the war in experimenting with forms and structures that express advanced trends in interior design. New uses have been found for metal and plastics, wood and buckram, and until recently most of the creative work for the domestic market has been carried out in these materials. Glass, used in large quantities for contract purposes in the form of plain opal spheres, and later of open based acorn and brandy glass shapes, classical and austere in design, found less favour among those fittings manufacturers designing for the modern domestic, showroom or coffee shop interiors.

During the past two years, however, several ranges of lighting fittings have made their appearance on the British market using glass shades strikingly different in character. Some of these shades have simple geometric patterns of clear and translucent glass and subtle contrasts of colour and texture, others have imaginative shapes and a surface finish which overcomes the appearance of brittle hardness normally associated with opal glass. Many of these fittings represent a departure from recent practice that seems to open a new field for exploration by the industry. Welcome as this development is (for in spite of its progress the industry still has much to learn from abroad) there can be little jubilation in the fact that in nearly all cases the most advanced modern glass shades have come from the Continent.

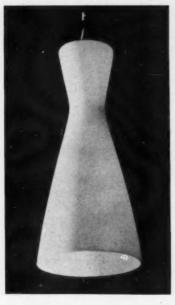
Does this mean that similar glass is not available from British glass manufacturers? If it can be produced in this country why are so many fittings manufacturers by-passing the British industry?

To try to find answers to these questions I talked to nine lighting fittings manufacturers representing firms of all sizes in the industry from one of the smallest (employing about 25 workers) to the largest (employing many thousands in the lighting department). Later I discussed the comments made by these firms with four glass manufacturers who between them supply a large proportion of the glass used by the British lighting fittings industry. I also asked a correspondent visiting the recent Hanover Fair in Germany, to interview six German glass manufacturers to find out how the approach to design and marketing differs between the two countries.

Inevitably the enquiry produced much conflicting evidence and a wide diversity of interest and opinion. Of the nine fittings manufactures interviewed four, including the largest, do not use any foreign glass. One of these firms does not use glass at all; two use quantities of

### Swedish glass

A group of satin etched opal glass shades both designed and made by a firm in Sweden, and used by Frederick Thomas & Co Ltd for a wide range of lighting pendants. The example in the centre has simple ceramic decoration and all five designs show something of the fine quality and finish which-many lighting fittings manufacturers maintain-cannot be rivalled by the British glass industry.



German glass
Though manufactured by a firm in Germany
this range of satin etched opal glass was
designed in this country by John Reid for
George Forrest & Son Ltd.



Why use foreign glass?



Austrian and Swedish glass

These glass shades are imported by Falk, Stadelmann & Co Ltd. Centre, a stock Swedish design with ceramic lines on satin etched opal. The remaining two were designed by J. M. Barnicot and made in Austria – left, a design of yellow ceramic with fine clear lines; right, a plain satin opal glass.

British plain opal glass in fittings for contract purposes but have no cause to use the more adventurous foreign glass, much of which they believe represents a fashionable and therefore transient phase; the fourth, the largest firm, makes fittings of all types including a few with decorated glass made in Britain. This firm claimed to be able to obtain anything that was required from the British glass industry. Of the remaining five, one firm imports a range of standard Swedish glass shades slightly modified to suit British fittings; one firm has designed a similar range of glass shapes which is made in Germany; two import from Germany a standard range of decorated glass; and one has designed a variety of glass for manufacture by a firm in Austria.

From this it is clear that there is no standard practice among British fittings firms – in fact the differences in approach directly express the desire to include something distinctive and different from conpetitors' designs. Yet whether these glass shades were designed in this country to be made overseas or whether they were purchased from abroad as stock patterns, it is significant that they each show an imaginative flair that is in the forefront of modern taste in lighting fittings design.

### Technique and attitude criticised

Two criticisms of the British glass industry were common to all five of the firms using foreign glass. Firstly they felt that in some techniq es Continental glass makers are ahead of those in this country. This

applies particularly to their skill in achieving many decorative effects such as those obtained from the use of fired on enamels, acid etching and sandblasting as well as in the consistency displayed over a number of pieces produced to the same design. In addition it was felt that in the imaginative interpretation of the fittings designers' ideas the Continental glass making firms are superior – or at least are willing to go to more trouble than their British counterparts. Secondly, the fittings designers had found that glass manufacturers abroad are more willing to carry out experimental work of their own. Several designers pointed out that they are not glass technicians and cannot be expected to be familiar with all the possibilities in glass design. They maintained that the glass manufacturers in this country should have taken the initiative several years ago instead of showing little enthusiasm for the new ideas which have been suggested.

One designer said that since the war British lampglass makers "had too many orders, insufficient experience and not enough men to be bothered with work of this nature". As a result Continental firms have captured a small but important section of the market although now, rather late in the day, several British glass makers are becoming interested in obtaining orders for glass shades of adventurous design.

# Continental practice

To sweeten the pill, however, the majority of fittings manufacturers admitted that conditions on the Continent have favoured the development of new ideas in glass. Because of the relatively widespread acceptance of modern design in Europe there is a much more receptive market there and a greater range of fittings available. There is also a closer relationship between the glass and fittings sides of the lighting industry (in many cases the two sides exist in the same firm) so that the development of new designs is equally within the interests of both. These remarks were supported by Professor L. Schneider who, speaking on 'New lighting developments in Germany' at the recent summer meeting at Harrogate of the Illuminating Engineering Society, said that among the glass works in Western Germany, "there was evident a marked preference for modern designs and for surface decoration in harmony with the tastes of the present day". The feelings of the more critical elements in the fittings industry were perhaps summed up by one designer who said: "I think that no one would purchase glass abroad if it were possible to get anything suitable made in this country".

# Comments from the glass industry

What did the glass manufacturers have to say about these criticisms? Of the four firms I visited, two are large scale suppliers of lampglass of various types, one of whom is making small quantities of good quality decorated glass shades for several British firms. One firm manufactures fittings as well as glass and markets a limited amount of decorated and coloured glass of poor design. The fourth firm produces large quantities of cheap glass shades of an extremely low standard (virtually a 'bread and butter' line to support the production of some of the best table glassware available in this country) as well as occasional quantities of opal glass.

Reactions from these four firms were almost unanimous. To a limited extent criticisms of technical skill were thought to be justified



Swedish glass
Satin etched and clear lines on a stock
Swedish glass imported by Frederick Thomas
& Co Ltd.





German glass
Two examples of stock designs from
Germany using ceramic decoration on clear
and obscured glass and imported by
Oswald Hollman & Co Ltd.

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# Why use foreign glass?







German glass

Examples of stock German designs used by Troughton & Young (Lighting) Ltd. Top, plain satin etched opal glass. Centre, obscured glass with white ceramic lines. Bottom, obscured glass with clear and ceramic lines.

and that there are some effects which might be difficult to produce economically. And yet it still must be recognised that the majority of imported designs present no technical problems. All four firms pointed out that the techniques of decorating glass have been known for many years. To support this view I was shown examples of satin etched opal glass comparable in finish to the Continental product, and some examples of decoration using sprayed enamel and sandblasting techniques.

Why then are these glass shades from British firms not being used by some sections of the lighting fittings industry? The answer was concisely given to me by one glass manufacturer whose experience had been shared by the other three: "We have never been approached", he said. He went on to explain that his firm had extended an open invitation to all lighting fittings designers to visit the factory and discuss any problems or ideas that arose, but so far no one had taken advantage of this opportunity. Another manufacturer describing his lampglass production said: "we are essentially manufacturers of component parts". He maintained that the lighting fittings designer must design the glass and the fitting together as a co-ordinated unit, and as such the glass manufacturer can only follow the designer's lead. For this reason he felt that it is up to the fittings designer to initiate new ideas and he would welcome the opportunity to work in conjunction with any designer who had experienced difficulty in obtaining unusual glass shades from British manufacturers.

### Comparative production costs

There are other factors which have a bearing on the situation. Several lighting fittings manufacturers thought that in spite of the import duty on glass and the shipping, customs clearance and dock charges, British glass manufacturers would have difficulty in producing similar glass in the small quantities required at prices comparable to those from the Continent. The reasons they believe are the lower production costs generally abroad and the willingness of Continental glass firms to produce small quantities in wooden moulds (wooden moulds are much cheaper than the iron and steel moulds mostly used in Great Britain). I was told by one glass manufacturer that it would be uneconomic to produce less than 5,000 items from a metal mould; a wooden mould would burn out after 100 or so depending on the size and shape of the design produced. The cost of wooden moulds on the Continent where there is a long tradition for production by this method is much less than in this country.

Not all lighting fittings firms supported this view on costs. One manufacturer who is now introducing British made plain sat a finished and decorated effects on a diabolo wall fitting, told me that the cost seemed surprisingly low compared with foreign decorated glass. The glass manufacturers were emphatic that they could give favourable quotations for small quantities of special glass. "It is in the mass produced opal glass that we have difficulty in competing with Contental prices."



Some fittings firms believe that an important advantage of using wooden moulds is the ease with which prototypes can be made – a necessity where designs of an experimental nature are concerned. One designer quoted the example of a new diabolo wall fitting he had designed which contained some unusual characteristics. He put the problem to two British and two German glass manufacturers. But though the prices quoted by the British firms were slightly less, one of the German firms sent over 50 prototype glasses free of charge showing numbers of variations and suggestions based on the original design. Such practice he thought would be impossible in this country owing to the high cost of metal moulds. A glass manufacturer, however, commented that it is an easy matter to make prototypes by hand using no moulds at all and that this could always be done if required.

### German designs for export

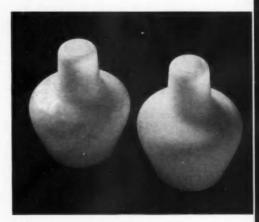
The challenge from Germany therefore is very real. From the Hanover Fair our correspondent reported that there were vast numbers of glass lampshades of all types on show, most of which are available to any purchaser in both small and large quantities. Although there was much poor design in evidence there was also an impressive core of designs displaying a high standard of skill and imagination. Several firms were reluctant to give information that might affect relationships with existing purchasers, but two firms were helpful.

One of these, Brüne GMBh, has recently employed a designer, Erich Beisl, to create a new range of imaginative designs. Another firm, Peill and Putzler, which has established a reputation since the war for designs of great delicacy and beauty developed under the supervision of Professor Wagenfeld (DESIGN March 1955 pages 44-50),

### British glass

The illustrations on this and the following page show examples of satin etched opal and decorated glass from British manufacturers.

A decorated glass shade using ceramic and clear lines made for General Electric Co Ltd and designed by Beverley Pick.



The opal glass shade, left, is produced by Webb's Crystal Glass Co Ltd to the design of Merchant Adventurers Ltd. The same shape is shown on the right, but it has been given an acid etched finish by the glass manufacturer to demonstrate British capabilities in the use of this technique.

Sandblasting through the outer layer of red glass to reveal the white inner layer has been used in this design by Hailwood & Ackroyd Ltd. But the execution lacks subtlety which spoils the effect.



# Why use foreign glass?

will co-operate enthusiastically with customers who wish to develop special shapes and decorations.

Many other points arose during my discussions with firms in this country. But whatever theories and ideas, reasons and excuses were put forward the fundamental paradox remained – that there are lighting fittings manufacturers who are buying special glass shades from abroad because they say they cannot be obtained in this country; and there are glass manufacturers who claim to be able to produce all, or nearly all, that is required, and at prices that will compete favourably with the foreign product. The solution would appear to rest with greater co-operation between the two sides, yet the situation is complicated by a number of circumstances which vary from firm to firm.

### New approach needed

In general the most adventurous designs come from the smaller fittings firms. Some of these firms made approaches to the glass industry several years ago, but because the quantities of special glass required were small and because at that time the glass industry was hard pressed to satisfy existing orders, the response was not encouraging. In the meantime, having established good relations with glass manufacturers abroad, the smaller firms are now reluctant to exchange this practice for one which they are by no means confident will be successful.

One of the largest firms, however, which claimed to be able to obtain all it required from Great Britain, uses very little glass of experimental design but large quantities of the more conventional opal types. Another large lighting fittings firm which claims to co-operate closely with the British glass industry, still finds it necessary to go abroad for those pieces required for its more advanced modern fittings.

But there are undoubtedly many cases in which a genuine effort on the part of the fittings designer to work in close collaboration with the glass manufacturer could result in a significant contribution to British lighting fittings design. On the other hand if glass manufacturers are sincere in their desire to satisfy the demand that exists then their capabilities must be demonstrated to the fittings industry. Clearly little progress can be made if each side sits back and waits to be approached by the other.

At a time when Great Britain is depending more and more for her livelihood on high design and quality standards, it is important that those products which set the pace, and therefore receive most publicity, should be representative of the best that Britain can produce. If the pace-setting designs are to a large extent made up of components from abroad, then the effect will be to undermine the reputation of British design generally. Glass manufacturers complain that they never have publicity for work of this nature and therefore, as far as they are concerned, they would receive little benefit. Would not a gesture in this respect from the fittings industry be a valuable contribution to a better understanding all round?





Two treatments of similar shapes made in Britain for Troughton & Young (Lighting) Ltd. Top, satin etched opal. Bottom, clear glass decorated with ceramic and clear lines.

# Orchid vase. LAKER James Powell & Sons (Whitefriars) Ltd.

# Tableware trends

GILLIAN E. NAYLOR

A special feature of the permanent but changing exhibition at The Design Centre will be 'Britain at Table', a selection of well designed tableware, from July 23 until September.

In order to find out how our design standards measure up to international trends, I recently visited importers of foreign tableware, and the china and glassware departments of several London stores where foreign designs are stocked.

Though it would be difficult to generalise about a definite trend in china and earthenware from what can be seen in the shops, it is true to say that modern designs sell as well as traditional ones in the stores that stock a wide range of both. Whereas foreign designers concentrate on subtle shapes, delicate glazing and surface textures for their effects, British products on the whole rely on decoration. In many cases the decoration is refined and naturalistic, well suited to the traditional shapes of bone china and earthenware.

Imported glassware is generally of a higher design standard than British, but the demand on the home market shows that many people prefer the thick glass, deeply cut in diamond patterns which is associated with the British tradition. One importer, however, told me that the demand for Scandinavian glassware was increasing; British manufacturers too are aware of this change of taste, and some of their best products show a greater subtlety of form.

Foreign competition is also apparent in the sale of cutlery. Two buyers told me that their sale was almost entirely confined to Scandinavian cutlery – Swedish Gense ware being the most popular. There seemed to be an absence of modern British silver and stainless steel hollow-ware in all the shops. Although it is expensive, there is a steady demand for imported silver and stainless steel, and for British period designs. Jensen from Denmark, and Gense are introducing new ranges which, it is to be hoped, will encourage British manufacturers to compete in this market.

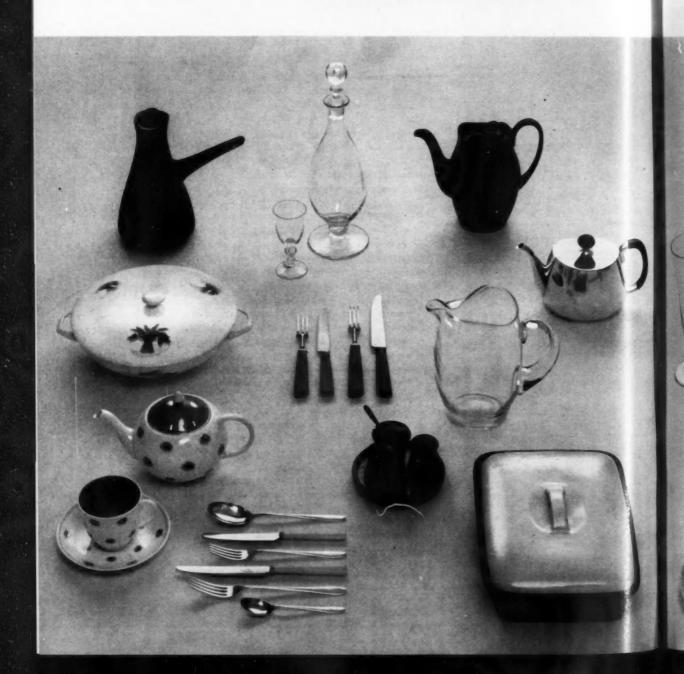
The exhibition at The Design Centre will show that we can produce good table linen for the home market, but buyers complain that our firms lack the energy of Continental manufacturers whose ranges are often more subtle in texture and colour than British products. Our heat resisting table mats, on the other hand, are lively and imaginative, and few buyers need to go abroad for designs.

Seen against the background of foreign imports, the tableware exhibition will reveal the strength and the weakness of British products. We have a strong and living tradition, particularly in pottery, and most of our best work is produced when designers work creatively within this tradition.

# British tableware

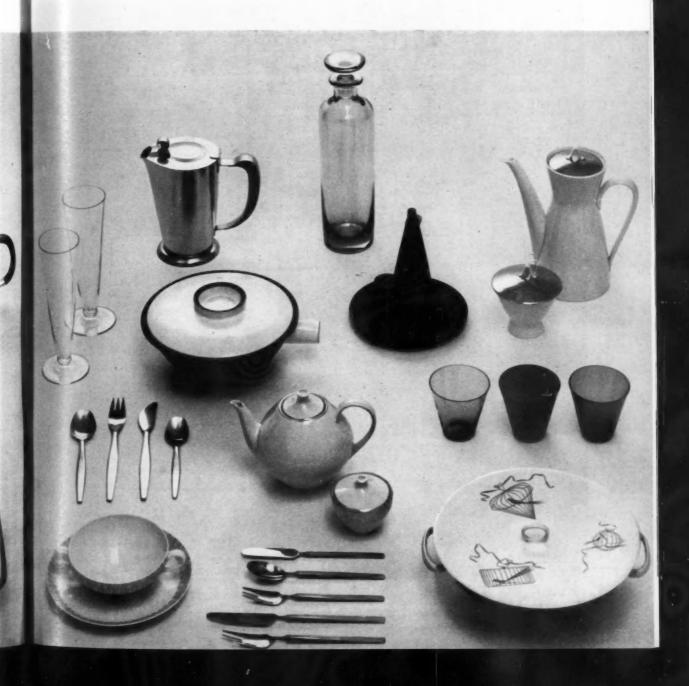
This selection of British tableware includes a stoneware coffee pot made and designed by Lucie Rie, a sherry decanter and glass by James Powell & Sons (Whitefriars) Ltd, and a coffee pot by Johnson Brothers (Hanley) Ltd. The lemonade jug on the right, is by the Stourbridge Glass Co Ltd and the wooden cruet set by Betula Ltd. The silver tea pot and the cutlery in the foreground were made by Walker & Hall Ltd, the walnut handled cutlery by Mills Moore & Co Ltd. The tea pot and cup are by Susie Cooper China Co Ltd, and the covered vegetable dish on the left by the Crown Staffordshire China Co Ltd. The dish in the foreground is 'Denby' ovenware by Joseph Bourne & Son Ltd.

In spite of current belief in an 'international style' these illustrations reveal striking differences between modern British and Continental tableware.



Foreign tableware

Sweden, Holland, Denmark, Finland and Germany are represented in this selection of tableware. The decanter in the background and the tall glasses on the left are by Strömberg of Sweden; the stainless steel coffee pot and the cutlery on the left are from the Swedish firm Gense; the cutlery in the foreground is Danish, made by Copenhagen Cutlery. The covered vegetable dish and the coffee pot and sugar basin are by Rosenthal. Germany is also represented by Schönwald's early morning tea pot and sugar basin, and by the soup dish in the foreground. The casserole in the centre is by the Dutch firm Zaalberg, the cruet set and the three small glasses are Finnish, the cruet set by Arabia and the glasses from Notsjö glass works. The items illustrated were kindly lent by Heal's, Woolland's and Finmar.



# **Garrick Street**

The exterior, RIGHT, shows the cast bronze grille designed by Geoffrey Clarke, with its symbols of Covent Garden Market activities. The interior, panelled in Indian silver-grey wood, has a simple alignment and soft diffused lighting, with an additional concentrated trough of lighting over the counter itself. One of Sally Holliday's drawings can be seen in the waiting space, with the manager's office beyond.

# Architectural enterprism



# MARTINS - BANK - LIMITED



# ish banking



A CRITIC, recently surveying the architecture of the last ten years, found it curious that the Church—when its funds allowed—should be more ready to experiment with modern architecture, than are the banks. But is it curious? The Church has always had to interpret its message afresh to each generation and in doing so has used all the arts. The banks have a deeper stake in the system, a greater need for rock-like security—security is their job—and a greater aversion to experiment. Bank architecture is the perfect example of dialectical materialism, since the last thing one plays cat-and-mouse with is one's money.

One fascination of architecture, indeed, is that it exposes such states of mind quite remorselessly. In the literally rock-like walls, the great heavy rustications and bronze gilles of Florentine and Genoese palaces the Medici tradition was founded; so, also, in the stone façade built up to the street line, was the town-planning pattern of Wall Street or Lombard Street. In the northern countries with their mercantile bourgeoisie – in Antwerp, Danzig and London – this same tradition was reinterpreted in more domestic terms, in the solid brick town house with dwelling above and counting house below. Thus did Fuggers, Gurneys and the rest replace the Medicis at an architectural level less princely, not less solid.

Thus was the tradition established; only, like most traditions, to be ultimately debased, to become a formula, to become ridiculous. The average bank, ultimately, bore the same relationship to the tradition as did the meanest Gothic revival chapel to the great cathedrals. The suburban branch became just like the other chain-stores – plus pilasters outside and mahogany in. The bankers – their world being the world of money – thought, when they thought about it at all, that money could put it right. This odd and most unhistorical piece of thinking made a fortune for Edwin Lutyens and Herbert Baker; it added to the language – on the analogy of 'stockbroker's Tudor' – another term of contempt: 'banker's Georgian'.

Now there was nothing wrong with Georgian when 'Farmer George' was on the throne, but since the sovereign happens to be called Elizabeth, Georgian can be only pastiche, and the best sort of



Tottenham Court Road

The interior showing Sax Shaw's tapestry against its background of English oak veneer in nine-inch wide slipped strips. The counter top is Australian black bean.

The exterior emphasises the contrast between the plain white painted wood window frames and the rich marble surround of tipo issourie with darker bands of vert stella.



# Architectural enterprise in banking



The arms of Martins Bank, over the entrance, are in bronze and silver bronze designed by Robin and Christopher Ironside.

The manager's office, lined in oak similar to the banking hall. The desk and radiator fittings are in walnut. The carpet is in black and olive green, the curtains in greenish-yellow



artist does not put his heart into pastiche. Pastiche is the tradition of tea shoppes, not of good banks. That tradition – the great, high tradition – was the best of its time in its time, the best that, say, the young Brunelleschi could produce. It has taken too long for a conservative profession to analyse their own tradition and to filter out what is sound from what is merely a bad habit.

### Beginning a revolution

It is very much to the credit of Martins Bank Ltd that it is now attempting to break down those bad habits of the banking world and to return to the reality of the tradition in a modern context. The bank is now employing young, able architects with a modern outlook. That is something like a revolution in a quarter that most of us had long ago written off. At the moment it is rather a quiet and careful revolution an injection of quite perceptible but not very alarming 'modernism' into banking. It is limited, so far, to some of the smaller branches and to banks within the structure of existing buildings; mainly therefore to interiors and to the bank 'shopfront'. Even this modest revolution however - since it represents a specific policy - was not, one imagines, arrived at without some heart burning and some qualms. The completely new bank building - modern design as a structural thing - has yet to come; but the evil spell that has overhung bank architecture for a century has been broken, and a fresh start, a perceptible start, has been made.

'Perceptible' – that means that it has been noticed. In these days, for some reason or other, banks advertise. The new architecture of the Martins Bank branches would seem, at the lowest, to be an admirable extension of their advertising. True, it has been criticised as well as praised. Criticism has come mainly from one or two of the older customers and from a few tough Covent Garden types who bank in Garrick Street. Criticised and praised – but definitely noticed, both by staff and customers; and how many customers of other banks have ever stopped to notice, one way or the other, the marble and swags that guard their money. At one of the new Martins branches, however, the manager reckons that many of the new accounts he has acquired are due to the architecture.

### Basic needs for transformation

What are the essentials of the banking tradition that must be preserved - however novel the means? In other words what, architecturally, do we ask of a bank interior? A sense of security - dignity without pretension or vulgarity; tranquility - a feeling that business is being done well because it is free from fuss and because there is space to do it; and as in any place of business, a sense of well-being and pleasantness. The old style of interior - bolection moulded mahogany and heavy plaster work - aimed at all this but almost always failed. It failed partly because it was pretentious and because it was not particularly pleasant, but that in turn was simply because the worthwhile artist cannot put his heart into that sort of work. It was also, incidentally, very expensive. The new Martins branches are more successful because the architects have analysed the problem before solving it, instead of grinding out a solution to some staff architect's rule-ofthumb. Martins Bank - which has no architects on its staff - has scored greatly by being free to choose outside designers to cooperate

# Architectural enterprise in banking

with its premises department, and by giving those designers every reasonable freedom.

As has been said, this was inevitably a rather conservative sort of modernism. Some of the examples indeed, such as those by Westwood, Sons & Harrison in Brompton Road, and by Harry Sherwood in Sloane Street, are even a trifle dull; good materials, pleasantly stained hardwood for partitions and counters and reasonable light fittings are about all there is to it. More glamorous and even controversial is Sir Hugh Casson's Garrick Street branch. Externally a bronze grille by Geoffrey Clarke has a pseudo-archaic look and bears a pattern of symbols of vegetable market activities - an attractive grille. Internally the rather rich and sombre tranquility is achieved almost at a stroke by soft diffused lighting, together with extreme simplicity in the general décor and a very careful alignment of counter top with partition transomes etc. This sort of thing - the establishment of a single horizontal line - can do more for simplicity and calmness than all the 'design' in the world. Sir Hugh's usual note of humour is found in a series of framed drawings by Sally Holliday - a bold stroke in banking, this - showing local activities in the market, Odham's, the Opera House, and other places.

### Towards a new vernacular

In the Tottenham Court Road branch Bridgwater and Shepheard have internally achieved a similar tranquility, the general softness of lighting and low tones of the materials - mainly English oak veneer and Ashburton marble - heightening the effect of Sax Shaw's brilliant tapestry of Bloomsbury scenes, based on Peter Shepheard's own sketches. Externally too the colour is good - white window frames inset in a very dark green Italian marble, with gold lettering and a great splash of metallic scintillation in Robin and Christopher Ironside's cartouche over the door - albeit a rather mean little door. One other word of criticism: this is a corner building; on the south side are three vertical windows rather widely spaced; on the west side three identical windows very close together. Seen from the angle view the effect is disconcerting and illogical. However, it is fair to add that the existing steelwork made symmetrical windows on each facade an impossibility. The same architects' design at Golders Green is simplicity itself, both inside and out - depending outside, once again, upon the dark marble, and inside almost entirely upon matt colour on plaster - olive green, yellow and pale blue - and on the dark Australian walnut of the counter on the pale travertine floor. The high note here is reserved for the manager's office; a rather poky little room, with almost no daylight, is transformed by a mustard yellow carpet and a panel of fine Danish wallpaper. This Golders Green branch - as banks go - must have been comparatively cheap; unlike Garrick Street or Tottenham Court Road, it does not strive for effect; it is extremely simple but extremely thoughtful and is probably the best of the bunch.

Small fry all this – half-a-dozen small branches – at least compared with the bank buildings yet to be done in the City and compared with bank property throughout the country. But it is a good move that has already borne fruit. Martins should feel justified in taking the experiment further; and even the other banks, one hopes, may follow suit.



### Golders Green

This branch, like that in Tottenham Court Road, contrasts simple wood window frames with the richer surround of tipo issourie green marble and with the doors of polished teak. The banking hall is simple, depending mainly upon painted walls for its effect – the left hand wall dark green, the back wall yellow and the side wall blue-grey, while the horizontal wood surfaces are Australian walnut and the vertical ones East African oliver wood. Far right is shown part of the accommodation for cashiers.



# Postscript by E. Norman Butler, assistant general manager, Martins Bank Ltd

I have been asked to write briefly on the Bank's policy over its new buildings.

Martins Bank does not employ architects on its staff but relies on the services of those in private practice. We have chosen with considerable care men who we believe will design for us branch banks which are good examples of current architecture.

We want our offices to be up-to-date and we hope they will give the public an impression of a go-ahead and forwardlerking institution. Our experience has shown that our customers like bank buildings which are designed in the contemporary style and they also arouse general interest in their neighbourhood. This is a good advertisement for us.

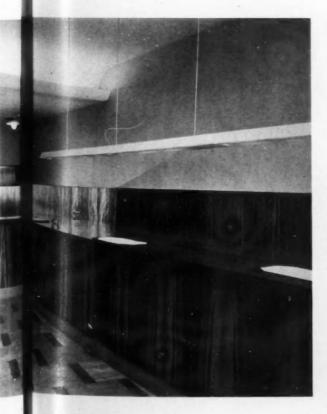
Our staff much prefer the brighter and gayer working conditions which modern buildings provide. We believe that new banks should be pleasant to the eye as well as efficient buildings for their purpose and that they should retain the strength and dignity always associated with banking design.

While there are certain factors common to all bank offices, arising out of the nature of the work done in them, we do not desire to have a standardised type of office such as is the practice of many multiple concerns. We seek rather individual treatment and variety to suit locations concerned.

We keep very close control on the plans and elevations produced by our architects through our premises departments at our head office in Liverpool and at our district office in London. The staff of these departments has accumulated over many years a practical experience of what is needed, which proves very helpful to the architects we employ. The general management takes a personal and detailed interest.

While we do not hesitate to criticise our architects' ideas, we always try to arrive at an agreed solution which they approve of as well as ourselves. We encourage them to select, subject to our approval, all the details of furnishings, such as furniture, floorings, decoration, lighting and all fittings. This ensures that everything in the office concerned will be in keeping with its general design.

If the branch banks described in this article are good ones, it is chiefly due to the bank having picked good architects in the first place to design them.





Design: Number 91

# PROGRESS in student textiles



This chair was one of six specially designed for the exhibition by Peter Ashen, a student of the School of Furniture Design, for the display of woven and printed designs suitable for coverings. This printed fabric was designed by Jean Nicol.

The recent Royal College of Art textile exhibition was designed by Pamela Robinson, a student of the School of Interior Design, in collaboration with A. W. Shearing, exhibitions officer of the British Man-Made Fibres Federation. All the textile designs were specially prepared for man made fibres and mixtures, and gifts of cloth were made by the British Rayon Research Association, Courtaulds Ltd, David Whitehead Ltd and Imperial Chemical Industries Ltd.

THE RECENT EXHIBITION of work by students of the Royal College of Art School of Textile Design arranged in conjunction with the British Man-Made Fibres Federation and held at the federation's head quarters in Hamilton House, London, has provided an opportunity to consider the latest stage in the development of this important school since the reorganization of the college in 1948. Under the direction of Professor Wyndham Goodden the school was able to assemble an extensive collection of printed and woven dress and furnishing textiles that undoubtedly represented a high point of achievement in its work during the last eight years.

As in the other design departments of the college, the School of Textile Design was created to provide specialized training at an advanced level and to give students a realistic understanding of the problems that would eventually confront them in industry. In printed textiles, however, changes in administration of the school tended to interrupt the smooth evolution of this programme during its early years, and delayed the full exploitation of the facilities available. Unlike a design department in industry with a permanent staff of designers, a school, with its continual 'turn round' of students and the inevitable fluctuation of good and bad years, needs a long period to build up to a consistently high standard.

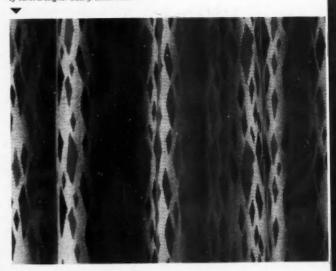
During the past three or four years the print department has been able to develop in this way, and under the stimulus of such practitioners on the teaching staff as John Drummond and Louis Le Brocquy, distinguished for their own experimental work, has moved towards its present maturity. A review of the college's summer exhibition of 1952 commented: "At this year's exhibition it was undoubtedly the wove a designs which commanded most attention" (DESIGN October 1952 pages 21-23). At the exhibition a year later it was reported "... considerable progress has been made over the past year in printed fabrics (DESIGN August 1953 pages 32-33). This year the Hamilton House the printed textiles had leaped so for a head that they stole the show.

The illustrations here show something of the variety and character of the exhibits. They were



A screen printed furnishing design on acetate in which the delicacy of the fine chalk drawing is well related to the lightness and translucency of the cloth. Designer Iris Hemmings.

Cotton warp and a viscose weft have been used in this Jacquard woven furnishing fabric which shows the high level of professional skill being maintained by the weaving department at the Royal College of Art. Designer Mary Lawrence.





This bold fabric illustrates the importance of controlled draughtsmanship and the use of broad tonal effects to preserve unity in a design of immense scale. It was designed by Barbara Brown for viscose satin but is shown here on cotton.

Design: Number 91

# Progress in student textiles

sophisticated, professional and revealed a consciousness of advanced international trends. Some of the large scale furnishing prints show the influence of recent Italian work in their suggestion of a painter's handling – colours being used in fluid, close-toned arrangements reminiscent of the rich harmonies of Braque or Sickert. This understanding of the importance to colour of tonal relationships provides today a new quality in printed textiles which suggests a link between screen printing technique and the lithographer's art.

The silk screen process has been exploited in other ways. It has been used to its full advantage in giving exact interpretations of skilled and imaginative draughtsmanship – a fundamental requirement in a textile designer wisely recognised in the school. It has

also been used to produce subtle textures and effects derived from overprintings – in one case of the same screen in different arrangements.

How did the exhibition as a whole measure up to commercial requirements? In general the woven designs, produced under the direction of Margaret Leischner, were perhaps the most directly related to current market needs and possibly for this reason made less immediate impact. The work of this department has maintained a high standard over a long period and showed no decline in the quality of its dobby and Jacquard designs. Many of the printed furnishing designs on the other hand were too large in scale and too bold in conception to have much direct commercial application. Inevitably an art school must produce a great deal that is impractical, but so long as it is vital much progress can be made. It is in the art schools that this type of experimental work is best carried out. J.E.B.

Three furnishings Left, varied textures give a freedom to the geometric pattern of this printed design on cotton and satin viscose by James Maguire; centre, a dobby woven design in rich colours which

makes use of cotton, viscose acetate and 'Lurex'; right, the charm of this design on cotton and viscose by Gwenfred Jarvis depends on subtle over-printings and closely related tones.



DESIGN AND STRESS ANALYSIS 2

For more than 100 years it has been said that the dawn of the scientific age is at hand. Major advances are to be seen in all the pure sciences, and mechanical aids of every kind have been put into the hands of the ordinary man. No one can blame the 'ordinary man' for forming the impression that the new age is already upon him and that most accoutrements of contemporary life are the products of scientific thought. However, any such impression is ill-founded, despite the dramatic advances in organic and inorganic chemistry, in electronics, and in nuclear physics.

To speak of a 'scientific age' is to imply that the state of scientific knowledge is adequate for the organised solution of the problems of the day, and that technologies developed for the systematic application of scientific knowledge are actually employed in industry generally. No such happy state yet exists. The overwhelming majority of the goods and services provided by British industry result from the application of craft rather than technology and their origins can be attributed to inventors rather than to scientists. This article attacks misconceptions which are widely held, even inside industry, and describes a more realistic approach.

# Design research

WITHIN EVERY PRODUCT DESIGN there is the ghost of the essential mechanical design, in other words, the basic method of performing the required function. There is also the minimal structural design which would just withstand the imposed loads. The former decides the basic layout of the product and the latter determines the minimum cross-sections for its components. All variations from these minima involve in greater or lesser degree the provision of inessential parts and structurally surplus material. The product designer may never actually employ components restricted to these minimum requirements, but he cannot design efficiently unless he knows what the minimum requirements are. Variations are necessary to add to the comfort of the user, to improve the appearance of the product, and to simplify the tasks of the manufacturer. The investigation of all these factors comes under the heading of design research.

### Research in industry

Design research is associated with so many other branches of applied research that it must be considered within the context of industrial research generally. From every outlet for the expression of scientific opinion a great deal of criticism has long been levelled at British industry for its continued neglect of applied research. In 1920 the Department of Scientific and Industrial Research was complaining that industry was not 'research-conscious'. In 1938, after a complete trade cycle of boom and slump, Professor Bernal<sup>2</sup> reported that 80 per cent of all non-government research was still undertaken by only 10 firms. In 1955 J. H. R. Nixon<sup>3</sup> was castigating industry for failing to realise the need for progressive development and for refusing to face the difficulties of getting something done. On the same occasion Professor Giffen<sup>3</sup> commented that even if a ratio of 8:1 were allowed

L. BRUCE ARCHER

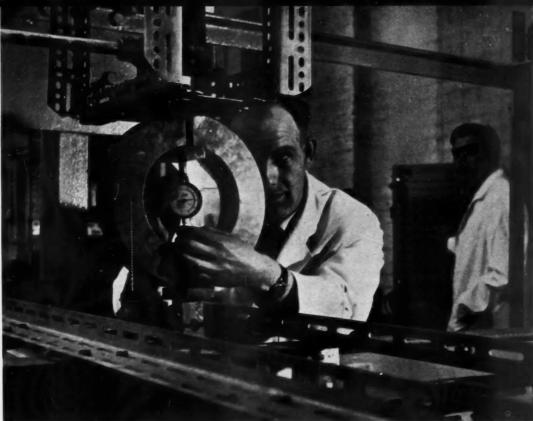
<sup>1</sup> Department of Scientific and Industrial Research, Annual Report, 1920, HMSO.

<sup>2</sup> J. D. Bernal, university professor of physics, Birkbeck College, London.

<sup>3</sup> J. H. R. Nixon, technical director, Brush Electrical Engineering Co Ltd.

<sup>4</sup> E. Giffen, V. C. Davies and J. H. R. Nixon 'Co-operation in Engineering Research between Educational Institutions and Industry'; proceedings of Institution of Mechanical Engineers, January 1955.

<sup>5</sup> E. Giffen, professor of civil and mechanical engineering, Queen Mary College, London.



Sam Lambert

Design research is conducted at establishments up and down the country, but seldom makes itself felt in the composition of everyday products. This photograph, taken at The British Iron & Steel Research Association's laboratories, where some of the finest work is done, shows a test on a model of a crane gantry girder.

for the difference between American and British facilities (instead of 3:1 ratio of populations), the expenditure by British engineering industries on co-operation with educational and research establishments was proportionately less than one-tenth of that of their American counterparts. Although a steady process of enlightenment can be perceived, the proportion of trained men engaged in scientific and technological work per 1,000 workers in British industry is rapidly falling further and further behind that of America, Russia, and several Western European nations.

One reason for this backwardness is the small size of the average British manufacturing unit. It is said that the majority of firms employ less than 200 workers. Financially, they cannot support research and development departments. The usual answer to this problem is the co-operative trade research association. Some of these, such as The British Iron and Steel Research Association, and the British Welding Research Association have been outstandingly successful. In many cases, however, individual manufacturers feel disinclined to disclose any useful information so that some research establishments have been reduced to impotence for lack of working data from the trade.

The small size of the average manufacturing unit is not the only

- 6 'Technical Education', Ministry of Education, 1956, HMSO.
- 7 Ministry of Labour 'Gazette', December 1952.
- 8 Alan Whitehead 'These Scientists Work for You', 'Business', February 1956.

reason for the neglect of research. Amateurism in management plays a very big part.9 In very recent years the British Institute of Management has succeeded by powerful leadership in starting a movement towards managerial professionalism and specialised training, and has evolved or encouraged the development of scientific management techniques for the small concern.10 At present, however, the bulk of managements are untrained and remain fundamentally unsympathetic to the principles of research. Even among the larger and more efficient companies there remains a residual resistance to a concept which is fundamental to the scientific attitude - the uninhibited publication of research results. The availability of data, the publication of results, and the cross-checking and cross-fertilisation which this produces were found by the British Productivity Council to be important contributory factors to American progress and prosperity.11 The same conditions prevail inside the state-owned industries of the Eastern European countries, where design research has reached standards which put even the Americans to shame.12

# Design for production

The one field where applied research has made widespread progress in Britain is that of production research. The development of new materials and manufacturing processes has been undertaken with success and has been rapidly adopted by industry generally. Pure research, such as crystalology, has been combined with applied research, such as metallurgy, and developed into the technology of production engineering. A whole new race of production engineers and process planners, with their own professional organisations, a new technical vocabulary, and a range of new techniques, 13 have come into existence and removed vital responsibilities from those draughtsmen and foremen who formerly held them. It is no longer necessary - it may even be undesirable - that a draughtsman should form an opinion as to the manner in which the component which he is drawing should be manufactured. His task is to describe the end product which is required and the degree of variability which can be tolerated on each dimension. The demands of the production engineer that he should be consulted at the earliest stages of a design have been supported by a wealth of data and technological argument. As a result the art of designing for efficient production has come to dominate all the other aspects of product designing.

# Design for function

Besides production considerations there are four other important aspects of design: functional, the delineation of the action which the product has to perform; mechanical, the devising of a means of performing the function; structural, the detail design of components which will withstand the loads to be imposed upon them; commercial, the incorporation of appearance, ergonomic, and other factors designed to make the product more acceptable to the consumer. Success



One of the earliest diamond frames (about 1885).

A very early X-frame (about 1886).





British bicycles are nearly all built with the familiar diamond frame. Design research shows that an X-frame is structurally superior, but the industry claims that its public objects to the appearance of 'unorthodox' frames.



A modern 'orthodox' bicycle by Raleigh Industries Ltd.

X-frame designed by Sir Alliott Verdon Roe. 'Cycling'



<sup>9</sup> Graham Hutton 'We Too Can Prosper', George Allen & Unwin, 1953.

<sup>10 &#</sup>x27;Management Techniques in the Smaller Enterprise', British Institute of Management, 1954.

<sup>11 &#</sup>x27;Design for Production', British Productivity Council, 1953.

<sup>12 &#</sup>x27;Report of a team of US Research Engineers visiting Russia', 'Metalworking Production', March 1956.

<sup>13</sup> D. F. Galloway, 'Production Engineering', 'A Century of Technology', pp 141-159, Hutchinson Scientific and Technical Publications, 1951.

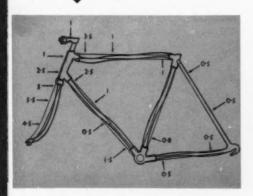


One of the most thorough investigations into the structural characteristics of the bicycle was undertaken by Francois Flusin at the Centre Technique d'Aluminium in Paris in 1949. Here is a view of a bicycle on the laboratory test rig.

When the indoor tests had been completed a road test was carried out by connecting the electrical resistance strain gauges to recording apparatus in an accompanying truck. The object was to provide a check on the realism of the earlier synthetic tests.



This diagram, showing the distribution and qualities of the stresses set up in the bicycle frame under load, was one of the results of the Paris tests. Note the two maximum figures near the steering tube.



in mechanical design has always been the sphere of the inventor, a term which is synonymous with the true meaning of the word 'engineer', but which is usually applied to the ingenious handyman rather to the usually less inventive academic technologist. It seems incredible that there is hardly any fund of information on mechanical design and engineers receive only a rudimentary training in this subject.16 So far as can be ascertained very few products are subjected to controlled experiments in this connection, possibly because managements rarely encourage engineering designers to leave their drawing boards for this purpose.15 The structural aspect is better documented and some excellent experimental methods of stress analysis have been recently evolved, mainly by the aircraft industry.16 However, the theoretical methods formerly available were so ponderous,17 and so inaccurate,18 that they have been almost totally ignored in general mechanical and structural design. The shape and strength of most engineering components are based on purely intuitive comparisons with what did or did not fail in earlier designs. With ergonomic and market research just beginning to gain a toehold in a vast and otherwise indifferent industrial system, and with appearance design only slightly better established, it can be said that up to now the form of most products was based upon guesswork, backed by experience.

# The case of the bicycle

Let us take a familiar example. The pedal cycle in its present form was developed in the closing decades of the nineteenth century by J. K. Starley, nephew of James Starley, the plough-boy turned inventor, who created the penny farthing. <sup>19</sup> The modern bicycle industry is large, well established and prosperous. It has a successful export trade. There are obvious incentives to make its products as light, robust, efficient and inexpensive as possible. It is also evident that in so simple a product the structural loads are relatively few in number and vary within fairly easily predictable limits. One would therefore imagine that the modern diamond frame was the embodiment of a scientific solution to an ideal design problem.

An enquiry into the industry reveals no such condition. Of the score or more books on the subject of bicycle design recorded by the British Museum, only one,<sup>20</sup> published in 1896, is now generally recognised in the industry. The principal modern commentator is Isaac Cohen, whose articles in 'Cycling' frequently criticise the industry for maintaining design practices which can be shown to be erroneous. There is no evidence of any design research having been done by the industry in Britain, but some extensive stress analyses were carried out in 1949 by François Flusin at the Centre Technique de l'Aluminium in Paris.<sup>21</sup>

<sup>14 &#</sup>x27;Methods of Teaching Functional Design': proceedings of Institution of Engineering Designers, December 1955.

<sup>15 &#</sup>x27;University Graduates in Engineering Design': proceedings of Institution of Engineering Designers, January 1956.

<sup>16</sup> J. B. Hartman and R. E. Benner 'Experimental Methods of Stress Analysis', 'Machine Design', June 1954.

<sup>17</sup> H. T. Jessop 'The Scope and Limitations of the Photoelastic Method of Stress Analysis': proceedings of the Royal Aeronautical Society, November 1952.

<sup>18</sup> J. B. Hartman and R. E. Brenner 'Limitations of Theoretical Methods', 'Machine Design', April 1954.

<sup>19</sup> H. W. Bartleet 'Bartleet's Bicycle Book', 1931.

<sup>20</sup> Professor A. M. Sharpe, 'An Elementary Treatise on Bicycle and Tricycle Design', 1896.

<sup>21 &#</sup>x27;Testing a Cycle Frame', 'Light Metals', April 1950.

From time to time since the bicycle was invented structural engineers have been coming forward to point out that ideally the frame should be of X form and a number of such frames has been built. The latest of these was designed by Sir Alliott Verdon Roe, the famous aircraft manufacturer, and under elaborate electronic tests showed itself to be lighter and superior to standard designs.<sup>22</sup> The industry, however, steadfastly refuses to depart from its 70-year old tradition and falls back on the limp explanation that "the purchaser wants a bicycle that *looks* like a bicycle and will not buy anything which looks extraordinary". Even so there is no evidence of there having been any serious attempt at market research on this matter.

The same defence was put up for pre-war styles of automobiles, typewriters, autocycles and many other products until American, Italian, Scandinavian and German competition forced radical changes. Endless examples can be quoted of designs which were conceived in Britain but ignored by British manufacturers until their exploitation abroad had made inroads into even the domestic market.

### Technique for designing

The application of scientific methods to the process of designing is quite beyond the means at present available to man. Professor Rosenhead<sup>23</sup> has pointed out<sup>24</sup> that a design problem might contain as many as 1,000 variable factors, and that in order to facilitate mathematical treatment real problems have had to be simplified and idealised by empirical or intuitive methods so as to contain no more than six variables. Electronic computers have brought the possibility of complete solutions within sight but not yet within reach. In any case, it can be said that although advanced scientific methods might have given the world bigger and better airships, it takes an eccentric and unscientific genius to break the chain of thought and produce the aeroplane. Nature's way with design is to create haphazardly, variegating the species by random mutations, so that the process of survival of the fittest reveals the most effective form. Stated another way, a blind man will hit a target if he fires enough shots in enough directions.

Designers of genius may be engineers, or industrial designers or handymen or artists. They possess in common the ability to strike out into the unknown and to find targets which no amount of logic could have foreseen. Nature's way, however, is prodigiously wasteful and intensely cruel. In the design world it would mean that there must be a myriad of attempts at novel design and almost as many failures. Nevertheless it is possible to harness genius by scientific methods. Well designed experiments<sup>25</sup> and statistically analysed results<sup>26</sup> can increase the probability of success and reduce the effect of experimental errors. Herein lies the brightest hope for progress in design research and for the recovery of the art of designing from its present intimidated state.

In the next article of this series some recently developed analogical and experimental techniques will be examined and some suggestions made for their application to the design of consumer products.



<sup>23</sup> L. Rosenhead, professor of applied mathematics, University of Liverpool.



This frame was damaged when the British champion rider Reg Harris, crashed during a race in Copenhagen in July 1955. The frame is distorted in the places and in the order of severity predicted by the Flusin tests.

# Acknowledgements

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Federation of British Industries

Institution of Engineering Designers

Institution of Mechanical Engineers

Institution of Production Engineers

'Light Metals'

Ministry of Labour

Mullard Ltd

National Physical Laboratory

Patent Office Library

Raleigh Industries Ltd

Royal Aircraft Establishment

'Times Science Review'

University College, London

Westminster Public Libraries

<sup>24 &#</sup>x27;Impact of High Speed Digital Machines on Theoretical Science', 'Times Science Review', Autumn 1954.

<sup>25</sup> R. A. Fisher 'The Design of Experiments', Oliver and Boyd, 1947.

<sup>26</sup> K. A. Brownlee 'Industrial Experimentation', HMSO, 1949.

On March 14 a new evening jewel was received by the Mayor of Bolton. The unusually high standard of design selected by the judges from competition entries made this an event of more than local importance.

# Civic patronage

Competitors were asked to incorporate symbols from the Bolton coat of arms (above) in their designs. E. G. Clements has worked within this limitation and the inclusion of elements from the coat of arms in his design enhances its fewel like character.

THE RECENT COMPETITION organised by the Company of Goldsmiths for the design of an evening jewel for the Mayor of Bolton is in many respects unique. Silversmiths today are seldom called upon to design a jewel for a civic authority, and the authorities themselves rarely have the opportunity to commission one. But now that public corporations and societies have largely taken the place of the private patron, it is essential that they should encourage all forms of art, especially the traditional crafts of the goldsmith and silversmith which are threatened by many difficulties. The Bolton corporation has set an example to other authorities in the way it combined with the Company of Goldsmiths to obtain the design of this jewel.

Last year, James W. Wigglesworth, a Bolton manufacturing chemist, gave a benefaction to the corporation of Bolton, and stipulated that part of the money should be used to commission an evening jewel for the mayor. The Company of Goldsmiths had advised the corporation some years ago on the design of its new civic plate, and now the corporation asked the company to organise a national competition for the design of the jewel. Designers were encouraged to specify the use of precious stones and enamels, and to base their designs on the Bolton coat of arms, illustrated on this page.

There were 92 entries, and these were considered by a panel of judges, including the mayor, his town clerk, Dr Joan Evans, director of the Society of Antiquaries of London, and Sir Gordon Russell, director, CoID.

The winning design was submitted by Eric G. Clements, a lecturer in the Birmingham College of Art and Crafts, who entered the competition on behalf of Payne & Sons Ltd, retail silversmiths of Oxford. His design is conceived fundamentally as a jewel, easily distinguished from the mayor's badge and chain of office. The judges reported that many of the entries, although good in themselves, had the quality of a badge or a crest rather than a jewel.

In Mr Clements' design the inclusion of symbols from the Bolton coat of arms does not detract from its essentially ornamental character. The shield of the coat of arms has been changed to an oval, and the arms themselves are applied in red and yellow gold on a field of 120 square cut matching rubies, invisibly set. The makers, Padgett & Braham Ltd, believe that this is the largest expanse of stones to have been set in this way. The rubies are framed in a white enamel border, mounted with green gold symbols of the moors near Bolton. Cut brilliant diamonds set in platinum in the carved gold rose of Lancaster, surround this frame. The decorative border is made up of engraved green gold rose leaves, interspersed with pearls, each screwed on to a projecting spine. An attachment for the chain is formed by the elephant and castle of the Bolton crest, and both this and the mitre below are carved in gold, enamelled and jewelled.

The mayor and corporation of Bolton are justifiably proud of their jewel, and its fine design and craftsmanship are worthy of the tradition represented by the Company of Goldsmiths.

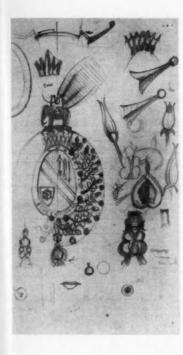
G.E.N.



The jewel took four months to make, and Mr Clements worked in close co-operation with H. R. Jones, principal badge maker to Padgett & Braham Ltd, to carry out his design. Yellow, red, white and green gold were used; the carving and engraving were the work of T. C. F. Wise. The enamellers were G. Harvey & Son, and E. Wolfe & Co Ltd set the gems. The jewel measures 5 inches by 2\frac{1}{2} inches and weighs 5.25 oz troy.









The jewel will be worn in the evenings instead of the official badge of office illustrated here. James W. Wigglesworth, the donor, said he had provided the jewel so that future mayors would not have to wear the heavy badge and chain of office for hours at a time during evening social functions.

# Overseas Review

# USA

Living room

versus

kitchen

Lazette Van Houten, journalist and wife of the American architect Victor Gruen, has sent us the following report of current design activities in the USA furniture and domestic appliance fields. She describes the general lack of new thought in the furniture industry in contrast with the vigorous experimental approach among the leading appliance manufacturers. The trend towards factory made built-in units of advanced design, which is bringing living room comforts to the kitchen, is attracting interest away from the conventional individual furnishing units. This lends weight to the ideas forecast by Alison and Peter Smithson in the 'House of the Future' described in DESIGN for June pages 24-28.

Significant modern furniture design in the USA has slowed down to almost a full stop. At the recent semi-annual mid-west markets reporters were hard put to find much indication that designers are interested in doing more than cater for the industry's present infatuation with 'contemporized' traditional. For several seasons now experiment and innovation have been of

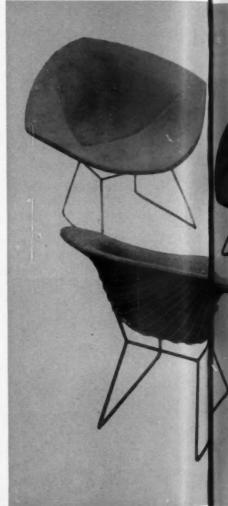
lessening concern to even the most original American designers. Among the best this has resulted in refinements of design; among the worst it has encouraged over adornment. In general furniture designers in the USA are resting upon one of those plateaux which are inevitable parts of design development.

# Stimulus lacking

Several other factors are probably pertinent. Retail business has been good and there is little need for manufacturers to exert themselves. There is also the possibility that the absence on the market for over a year of the jointly sponsored 'Good Design' show of New York's Museum of Modern Art and Chicago's Merchandise Mart may have removed one of the most important sparks to vigorously creative design. Without some prodding, some guidance or some impelling need, such as bigger sales, average furniture manufacturers and retailers are still uncertain about both the philosophy and the aesthetics of modern design. They will therefore whenever possible turn their backs on the present and try to resurrect the past.

For reasons impossible to analyze the favourite style this season is 'Italian provincial', which in the words of one critic, is "neither Italian nor provincial". 'Provincial' is the magic word at present and is applied to French, Early American, Spanish, English rural and so on. The nomenclature is endless though the examples vary little from each other.

An example of this uncertainty about the direction in which furniture design is moving is the firm which presented Frank Lloyd Wright's first commercial group to the open market in January. Even to those uninformed about modern design Mr Wright's distinguished position in modern architecture is recognized, and consequently they considered his furniture to be equally significant and distinguished. His furniture is in fact an unsuccessful attempt to warm over some of the ideas that he has used



These chairs from a 1952 range of designs for Knoll Associates are by the Italian born painter, sculptor and designer Harry Bertoia. Designed for indoor or outdoor use, they resent a type of experimental work largely absent from the American furniture industry today. They are made of welded steel wire with a special rust resistant finish and have slip-on covers upholstered with foam rubber.

Stewart Mac Dougall and Kipp Stewart have added to their 'Glenn of California' line this free form walnut cocktail table. It retails for approximately \$119.









The new design team of Benesch|Arnold has designed a 40 piece group of coordinated pieces for W. F. Whitney Co. Birch, finished a walnut colour, panels of various colours of laminated plastic, mosaic tops, stainless steel pulls and legs are some of the design details. In the moderate price range, typical prices are \$119.50 for a 33-inch chest; \$99.50 for a drop leaf table.

# USA



These two chairs illustrate contrasting influences in modern American furniture design: top, Finn Juhl's new chair for the Baker Furniture Co derived in style from the traditional craft basis of the Danish industry (approximate price \$270); bottom, Florence Knoll's parallel bar construction system used in a chair for Knoll Associates suggesting the influence of modern American technology (approximate price \$225). over the past 50 years for custom pieces, and built-in units for specific houses. As commercial furniture it makes no contribution at this time to the development of a truly contemporary style. It's an even bet that retail salesmen in more than one store will attempt to sell it as 'modern provincial'.

### Two leading firms

Here and there however there are indications that some designers and manufacturers have refused to surrender to this form of romanticism. Foremost among them is the work of several designers for Knoll Associates and a new designing team, Benesch/Arnold, for the W. F. Whitney Co.

For Knoll Associates an outstanding group of storage units of great simplicity, fine proportions and pleasing material combinations, a group of seating pieces on Florence Knoll's parallel bar construction system, previously confined to table design, and a fine new bed by Richard Schultz, are important contributions to modern furniture design.

At a much lower price level and therefore of great importance to a movement which, to develop fully, must be available to middle income groups, are the designs for the Whitney Co. Until recently this firm was engaged solely in manufacturing Colonial reproductions. The new range consists of 40 living, dining and bedroom pieces which adequately answer the needs of modern living and which are good to look at as well.

For those who are looking for good design and who need not search for it at a price, importers are steadily expanding their stock of Danish and Swedish case goods, seating pieces and tables. These continue to be among the most interesting and pleasing designs available to Americans and to some extent



Florence Knoll's new series of chests for Knoll Associates is made of teak, or various combinations of teak and white laminated plastic. Each piece is finished on all sides; drawers are set on metal slides. Magnetic catches on cane-panelled folding door, and leather lined storage trays matched to the leather top are features of Paul McCobb's new chest for Directional. Four finishes on mahogany are available.



remain an important influence on American design.

### **Experimental kitchens**

In the domestic appliance industry there is a completely different state of affairs. Long inert, appliance manufacturers have swung into action with a flourish. They have redesigned showrooms and launched into an energetic drive for built-in freezers, refrigerators, ovens and rotisseries. They have introduced for the first time electronic ovens. They display these new products in fanciful kitchen settings designed by 'name' decorators. Much of this activity amounts to something much more than showmanship - the dressing up of an old model in a new guise. Fundamental research into the design and function of kitchens has been carried out by several of the big American appliance manufacturers. Frigidaire's series of dream kitchens have embraced a fair share of push button gadgetry, but they also represent a serious attempt to create a logical and co-ordinated plan from a miscellaneous collection of equipment. Perhaps of more immediate significance, because of its existence as a saleable commodity, is General Electric's 'Kitchen Centre' designed by Arthur N. Becvar. This package kitchen combines together a series of appliances in a compact unit under a single working top. It is intended primarily for sale direct to the builder to be incorporated in new houses and sold as part of their purchase price. These experiments show that appliance manufacturers are out to make the work area of the modern house not only the most efficient but the most attractive and liveable part. If the furniture industry sits too long on its 'provincial' plateau the appliance industry may convince modern Americans that the living room is as dead as its furniture. LAZETTE VAN HOUTEN



Typical of the trend towards built-in refrigerators and freezers is this twin unit with copper doors by Amana.

Frigidaire's 1956 'Kitchen of Tomorrow', the third in successive years, shows something of the fundamental research into design and planning which is being carried out by American domestic equipment manufacturers. Illustration by courtesy of 'Industrial Design'.



# USA

### Kitchen centre

General Electric's 'Kitchen Centre' in its simplest form, I, consists of four appliances washer dryer, sink with food disposer unit below, dishwasher and cooker - under a single stainless steel top with all controls on the back panel. The unit is also available in a number of combinations in which some of the specialized appliances can be replaced by storage cabinets. In addition there are de luxe versions, 2, which incorporate a storage cabinet with sliding glass doors above the back panel, a radio, 4, and a wall oven for conventional or electronic cooking, 5. A pull down flap reveals two retractable electric cords, 3, for plugging in kettle, toaster and other standard kitchen appliances. The complete unit is self supporting and can be used free standing as a room divider in an open living area, as a single wall unit or in various 'L' or 'U' arrangements. Wiring and plumbing are much simplified and are connected to central points. Function in relation to the users' requirements was carefully studied in the design. The appearance is smart but free from the excessive ornamentation which mars many American appliances, and here has been replaced by simple lines and bold colour. Intended primarily for the builder market for new home construction it costs approximately \$1500, which is less than the total cost of the components bought separately.

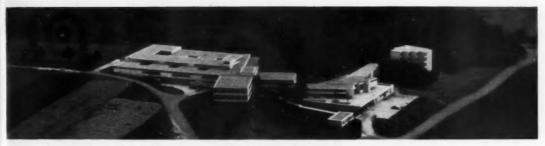












An aerial view of the school. Training departments, workshops and offices are in the main building on the left.

# Germany

# Design school in the Bauhaus tradition

The Hochschule für Gestaltung was officially opened at Ulm on October 2 last year. The following article, describing the school, is based on a report ent in by Margit Staber, a member of the information division of the Hochschule.

The Hochschule für Gestaltung at Ulm is an international school for the training of designers, architects and artists. Its foundation was made possible in the first place by the energy of a small group of people who felt that the ideals and traditions of the Bauhaus should be revived in post war Germany. In 1950 a substantial grant from the McCloy Fund enabled Inge Aicher-Scholl, principal of the Ulm Institute of Adult Education, to open a fund to build a new design school in memory of her sister and brother who had been executed by the Nazis. The fund was increased by donations from official and private sources, and building operations began in 1953, under the direction of Max Bill. Today maintenance of the school is assured by government and municipal subsidies, as well as by its own revenues.

It is essentially an international design school, and students and teachers have come from many countries to work there. At present there are about 100 students, and the maximum is fixed at 150; only students with some experience in design are accepted. The teaching is based on that of the Bauhaus, and its aim is to ensure that each student receives a comprehensive education in design, and a thorough grounding in other subjects.

Max Bill, in the prospectus of the Hochschule, writes "This school is a continuation of the Bauhaus; but it includes some new departments of design which 20-30 years ago had not assumed the importance they have since acquired". As well as training departments for product design and architecture, there are departments for studying visual communication and information. In all but the town planning and information departments students have been working in temporary premises in Ulm since 1953. There is close co-operation and interchange of ideas between each department and all students attend a year's basic course on design, directed by Tomàs Maldonado,

One of the workshops where students carry out their own designs. The lighting was designed

before specialising in any one subject.

The largest and most comprehensive department is the product design section, directed by Max Bill. This has workshops for producing designs in wood, metal, plaster and plastics, and for experimenting with surface treatments; the work here is planned in conjunction with a research department for product design, also under the direction of Max Bill. Theory and practice, therefore, are closely linked. Students and teachers have concentrated in the first place on fitting out the school itself. Beds, wash basins, door handles and lighting equipment were designed in the department, and their production carried out as far as possible in the workshops. Some of these designs are now in general production, and several new orders have been carried out, notably the radio and television apparatus designed by Hans Gugelot for Max Braun, a German radio firm.

The architectural section has so far by Walter Zeischegg, of the product design section, for use throughout the school.



#### Germany

been concerned with designing and building the school itself. Max Bill, the architect and head of this section has deliberately kept the design and materials used as simple as possible in order that more money should be available for fitting out the workshops. The school is planned as a free arrangement of intercommunicating workshops, laboratories and studios; students and staff live in hostels on the premises. When work on the school is finished, the architectural section will go on to study new techniques in prefabrication and the use of new building materials.

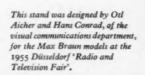
The visual communications department, directed by Friedrich Vordemberge-Gildewart, designed the stand for the Braun models exhibited at the German radio and television show last year, and a touring exhibition 'Good Toys', sponsored by the Ulm museum was also designed in this department. Graphic design, display, and typography are included in their programme of study.

The school is still in the experimental stage, and needs time to develop before its full influence can be felt. It has the support and co-operation of the German government and industry, and its opening last October marked a further stage in Germany's re-emergence in the field of design.



Wash basin designed by Max Bill and Otto Schild for use in the school.

A door handle designed in the product design section by Max Bill and Ernst Möckl.







# NEWS

opening of The Design Centre in May. Over a hundred general stores in all parts of the country are making a special effort to stock the goods displayed in the exhibition.

These special displays were part of the ping public with the services of The Design Centre. CoID's campaign to familiarise the shop-

#### DESIGN CENTRE

#### Cotton exhibition

On June 4 Derek Walker-Smith, Parliamentary Secretary to the Board of Trade opened 'Design in Cotton', the first of the special displays which are to be a regular feature of The Design Centre. The exhibition has been assembled by the Cotton Board Colour, Design and Style Centre, Manchester, and shows examples of well designed dress and furnishing fabrics, woven and printed, in pure cotton and mixtures of cotton with other fibres. This exhibition will remain open until July 7, while the permanent exhibition of well designed British goods will continue in the remaining area of the Centre.

#### Retail displays

Department and furnishing stores in many of the principal cities of England, Scotland, Northern Ireland and Wales staged special window and interior displays to mark the

#### REPORTS & MEETINGS

#### IES summer meeting

The summer meeting of the Illuminating Engineering Society was held recently in Harrogate. Seven papers were given; J. Havelka, who is in charge of the National Lighting Laboratories in Czechoslovakia, and Professor Ludwig Schneider from the Osram company in Germany discussed developments in lighting in those countries. Other papers included 'Relative brightness of coloured light sources' by H. M. Ferguson and W. R. Stevens, 'Lighting of small factories' by J. S. McCulloch, and 'A critical analysis of lighting equipment and its maintenance' by J. Mortimer Hawkins and C. J. Veness. In a paper on 'Light and colour in daily life', J. W. Strange and H. Hewitt reviewed lighting conditions today, and stressed the need for more experiment and a more imaginative approach to home lighting. D. W. Durrant discussed the designer's point of view in his paper 'Decorative lighting - a designer's approach', and pointed out the need for better design and more 'lighting artists' in the industry.

#### Sales van for seedsmen

Since there are no laws of copyright for new breeds of plant in this country, importers of new strains from the Continent can only profit from their enterprise by hard selling in the first full season of importation; after this home grown seed is generally available.

In order to introduce Koga 2 wheat to the farming public this year Nickersons, the Lincolnshire seed specialists, decided to use a touring display and visit the greatest possible number of country markets and other agricultural centres as part of a short and concentrated selling campaign.

A Volkswagen van proved the best solution to this need; less bulky than a towed caravan for manoeuvering in restricted spaces (an important consideration at some markets), its three way access to the main body space gave a convenient natural disposition of facilities, with the display occupying the front half of the body between the two side doors, and 'office' and storage space in the rear. The external colour scheme and lettering, which relate to the Nickerson house style, and the conversion, and display were the work of Richard Hamilton. REYNER BANHAM





#### 'Thought for food': A correction

On page 23 of the June issue of DESIGN a menu for the Oxford Street Corner House Bacon & Egg' restaurant was wrongly attributed to the designer H. A. Rothholz. We express our sincere regret for any inconvenience this may have caused him.

Above is shown a pleasing design by Mr Rothholz for the 'Bacon & Egg' menu used in Lyons' Corner House, Coventry Street, the Strand Corner House and Maison Lyons, Marble Arch

#### Glassware exports

The Glass Manufacturers' Federation reports that 1955 was a record year for exports in the British glass industry. £19.8 million worth of glass was sent abroad - an increase of £5.9 million over exports in 1954. In domestic and decorative glassware, 174,308 cwts were exported in 1955.

#### Progress in packaging

The first National Packaging Conference organized by the Institute of Packaging at Brighton recently set out to discuss a wide range of subjects. The basic requirements for a package were laid down by Leslie Gamage in his opening address - good design and sound construction.

Clearly the sales side plays a large part in deciding the package for a product, and the 'packaging engineer' must design a package to fulfil the hunches of the 'voice of experience in the field'; that voice, unfortunately, is not always guided by sound market research. Only a few weeks previously at Bristol, the South Western branch of the Institute of Packaging faced a lively audience at a Packaging Brains Trust arranged in co-operation with the local Federation of Townswomens' Guilds. There it was clear that the users of packs were by no means as happy as the sales managers and packaging engineers in conclave at Brighton. The representatives of the Townswomens' Guilds were outspoken about the detergent, sugar, scouring powder, soap flakes, cereals and other dry

continued on page 47



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goods packages that fall short of the yardstick laid down by Mr Gamage.

Brighton was the first national conference and, as such, a step in the progress of packaging. Some may recall an earlier milestone in 1947, when the CoID brought together experts in wartime packaging to discuss with representatives of industry some of the lessons to be learned from the immediate past.

P.H.

#### Human factors in road transport

The design of cars, motor cycles, street lighting, head lights, roads and road signs were all criticised during the symposium of the Ergonomics Research Society on Human Factors in Road Transport, which was held at Bristol University on April 16-19. Reports of research now being carried out at the Road Research Laboratory, universities, research organisations, and by workers in other countries showed that the problems of road safety and efficiency are being studied in two ways: the study of driver behaviour, and investigations into the effects of the environment on the driver. It was shown that careful study of the driver's immediate surroundings within the vehicle and on the road could lead to more precise understanding of the cause of road accidents and the discomforts of driving.

Of the papers read those concerned with lighting patterns for street lighting, the effects of glare from head lights, the positioning of flashing indicators, the positioning of motor car controls, visibility from the driving position, and the design of read signs were of special interest to the designers of vehicles and street furniture.

The proceedings will be published in book form with full texts of all papers.

#### COMPETITIONS

#### Giles Bequest

The trustees of the Victoria and Albert Museum have announced details of the Giles Bequest colour print competition for 1956. The competition is limited to original woodcuts and linocuts; there will be a first prize of £75, a second prize of £50 and a third prize of £30. Further details can be obtained from the Circulation Department, Victoria and Albert Museum, South Kensington, London sw7.

#### International posters

The fourteenth International Dairy Congress is to be held in Rome from September 24–28 1956, and an international poster competition to advertise milk and milk products has been organised to coincide with this event. Designs entered from the UK should be sent to the National Milk Publicity Council, 148 Strand, London wc2 by noon on July 12. A panel of judges, including Peter Hatch, head of graphic design and production, CoID, will select the posters which are to be exhibited in Rome, where an international jury will choose the best designs. Further details of the competition can be obtained from the National Milk Publicity Council.

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#### American designers speak

The first of what is hoped will be many informal discussion meetings in The Design Centre took place recently between three distinguished American designers and members of the Society of Industrial Artists and CoID staff. The designers – Arthur N. Becvar, Walter C. Granville and Alan R. Cripe – were visiting London for a few days on the last lap of a European tour extending to Rome, Florence, Milan, Zurich, Hamburg, Copenhagen, Helsinki and Stockholm. Each of the visiting designers gave a brief account of his work illustrated with numerous coloured slides.

Arthur N. Becvar, manager of industrial design for the Appliance and Television Division, General Electric Co, and president of the American Society of Industrial Designers, had some encouraging, and for an American, revolutionary things to say about design for artificial obsolescence, particularly in the domestic appliance industries. The practice of changing the handle on, say, a refrigerator every year and calling it a new model is not, he thought, good policy. He felt that any designer, having produced what he considered to be the best solution for the design of a piece of equipment, could not produce a better solution to the same basic specification.



Arthur N. Becvar

True development in design, he said, can only come from a fundamental reconsideration of the technical, commercial and social problems involved. This philosophy guided the development of the General Electric 'Kitchen Centre' (illustrated on page 42) which represents a new approach to the appliance market. Automation, he felt, will have a profound effect on design since minor changes of appearance would not be practical in a fully automatic factory. This points to the need for designers to be represented at a much higher level in management where basic policy is decided. Too often today the designer is considered as a mere stylist who is not brought in until the basic decisions have already been made.

Alan R. Cripe, director of design, The Chesapeake & Ohio Railway Co, described recent efforts to create an "overall design identity" in his company's rolling stock and equipment. This was achieved mostly by standardizing of colour schemes and type

Photographs by Sam Lambert



Alan R. Cripe

faces and by designing a new symbol. The oldest passenger car in the company's fleet is only ten years old and as such the standard of comfort and interior design is considerably higher than on the majority of American railroads. But this is also a disadvantage, he said, since it prevents more rapid development of the lightweight articulated trains which are at present in the experimental stages, and which in various forms are also being introduced by other operators. These trains with their high speed, low operating cost and increased comfort represent, he thought, the next important step in the development of rail travel.

Walter C. Granville, assistant director of the department of design, Container Corporation of America, described the important part which colour has played in the work of the corporation in recent years. Since the boxes and packages which are the end products of this company are themselves of little design interest, the desire to establish a progessive design policy found its outlet mostly in publicity and advertising. A start was made with a new symbol, designed by Egbert Jacobson, director of the design department, and later several series of posters were produced portraying United Nations services throughout the world, designs symbolizing the 48 States, and so on. Other prestige productions include a series of world atlases - superb examples of printing and collated information - and the fine 'Colour Harmony Manual' which it is hoped will be discussed later in DESIGN. Experiments in the use of colour in the corporation's offices began nine years ago, and represent one of the earliest examples of a practice which is growing rapidly in the United States.

Walter C. Granville





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#### Craftsmanship competition

The Goldsmiths', Silversmiths' and Jewellers' Art Council of London has announced details of its 1956 competition and demonstration of craftsmanship. The competition is open to designers working in precious metals and stones, and includes a special section for the design of the Andrew Golf Trophy. The closing date for entries is October 5, 1956; entry forms and further details can be obtained from the Clerk of The Goldsmiths' Company, Goldsmiths' Hall, Foster Lane, EC2.

#### Paper box design contest

The British Paper Box Federation and the British Carton Association are organising a contest this year, based on the lines of their 1954 competition. Competitors are requested to submit their entries during October 1956, and judging will take place in November. All the entries will be on how during the 'National Packaging Exhibition' at Olympia in January 1957. Further information can be obtained from the Contest Secretary, British Paper Box H Jeration, 27 Chancery Lane, wc2.

#### **EXHIBITIONS**

#### 'Glass and the student designer'

The Glass Manufacturers' Federation is holding an exhibition 'Glass and the student designer' at the Federation's head-quarters, 19 Portland Place, London wi from July 13-27. The Royal College of Art, Edinburgh College of Art and Stourbridge College of Further Education are among the exhibitors. The glass will be shown in a setting of modern furniture and textiles now available on the market.

#### SIA in Hungary

The exhibition of British graphic design, reported in DBSIGN for June page 45, opened in Budapest on May 5. During the first week over 2,000 people visited the exhibition daily and the Hungarians have now suggested that it should tour other towns in Hungary. David Caplan, who organised the exhibition is planning to send an exhibition of product design to Hungary, composed mainly of photographs.

#### MISCELLANEOUS

#### Craftsmen furniture makers

An association has recently been formed to represent craftsmen furniture makers throughout the country. It aims to encourage fine craftsmanship and quality production and at the same time maintain a public relations service. It will inform a wide public of the whereabouts of individual makers, arrange insurance and legal advice for its members and organise an apprenticeship scheme. The association also plans to publish a news sheet, organise competitions and act as a liaison with other organisations. Further details of the Association for Craftsmen Furniture Makers can be obtained from O. W. Lipton, 35 Camp Road, Wimbledon Common, 5W19.

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#### Largest firm makes modern

'Link' is a new range of furniture recently introduced by Harris Lebus Ltd to meet the growing demand for good quality modern furniture based on traditional design. It has been specially designed for 'occasional' buying; throughout the whole range exteriors are of solid oak or oak veneer, and the interiors mahogany or mahogany veneer. The main fabrics used in the upholstery are moquettes and tapestries, in a wide range of colours and designs;

handles to drawers, cupboards and doors are based on the same design and made of an untarnishable alloy with a brass finish. A selection of pieces from the new range was exhibited in the Harris Lebus showrooms in Maddox Street during May.

Sir Hugh Casson opening the exhibition described 'Link' furniture as "clearly mid-century in its light colours, gay upholstery, sturdily poised structure and inter-availability", and paid tribute to the firm's achievement. The Lebus factory is now the largest furniture factory in the world.



The 'master' bedroom in the 'Link' range exhibition. All the furniture is in pale oak and the wardrobe is lined with mahogany veneer. The twin bed-side tables have pull out shelves faced with heat resistant plastic for the morning cup of tea.

'Link' living room furniture - the settee and easy chairs illustrated here are covered in green 'tweed' tapestry fabric. The coffee table in oak and oak veneer has a sliding drawer which can be opened from either side and a rack for magazines and papers.





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#### Benjamin Franklin Medal

The Royal Society of Arts has instituted a new award, known as 'The Benjamin Franklin Medal', which is to be made annually to "individuals who have attained early distinction, with promise of further achievement, in the promotion of arts, manufactures and commerce". The council of the RSA felt that there was room for an award such as this for younger men, as their senior award, the Albert Medal, is normally given to older men who have already achieved high distinction.

#### British goods in Italy

The Rt Hon A. R. W. Low, Minister of State, Board of Trade, commented recently on his impressions of the International Samples fair in Milan. He found the display of British goods for the home in the UK Government pavilion attracted much praise, and added "My impression of the British performance at the 1956 fair can best be summed up by a remark made to me independently both by a British business man living in Milan and an Italian business man – "the British goods shown at the fair prove that Britian makes the things which Italians want to buy. Now send out more people to sell them" ".

#### Japanese textile design centre

A textile colour design centre was recently opened in Osaka, Japan. Manufacturers in Japan are now required to submit the designs they intend to export to this centre, which holds over 200,000 samples. Each design is inspected and given a certificate indicating whether it is original or not. Various exporters' associations in Japan have agreed not to accept a product for

#### Self service tea machine

The 'Bruin' tea brewer is a self service machine which ensures a constant supply of freshly made tea for canteen purposes. When a cup is pressed against the lever, fresh tea and milk are discharged. The maker, Peerless & Ericsson Ltd, claims that the machine can cope with up to 600 cups an hour and follows the correct methods of making tea laid down by the Tea Bureau.



export if it bears a copied design, and in this way the centre aims to prevent textile design copying and provide a system of registration to protect new designs.

#### Scandinavian design centre

On American initiative, plans have been put forward to establish a Scandinavian design centre in New York, in connection with the American Scandinavian Foundation there. The cultural commission of the Scandinavian Council is now investigating the possibility of putting the plan into action.

#### William Haigh

Mr William Haigh, an original member of the CoID, died recently in Sheffield. The following is an extract from an obituary notice in 'The Times' by Sir Gordon Russell, director, CoID:

William Haigh was an original member of the Council of Industrial Design, on which he served for six years, in more than one sense. He was a loyal and devoted supporter of the Council, often against considerable odds, because he was a convinced believer in its work. Although he had little formal education and started work in a mill at the age of 12, his eager and inquiring mind ranged over so many interests and he travelled so extensively that he never looked at any problem in a petty way. Starting from scratch he built up a considerable business, controlling three mills, but commercial success left him quite unspoilt. An enlightened employer, he was one of the foremost manufacturers of cloth to see that it must be considered in terms of clothes, and therefore he came to be a most popular and entertaining link between the fashion world and the Yorkshire wool trade."

#### Trunk roads committee

The road improvement programme of the Ministry of Transport and Civil Aviation includes plans for the construction of many miles of trunk roads, and a committee has recently been formed under the chairmanship of the Hon David Bowes-Lyon to advise the Ministry on the landscape treatment of these new roads. Members of the committee include Brenda Colvin and Clough Williams-Ellis.

#### Zinc bulletin

The Zinc Development Association has now brought out an English edition of the second 'European Zinc Bulletin'. This bulletin is devoted to the European hardware industry, and there are sections on Great Britain, France, Belgium, Germany, Switzerland and Italy, with photographs of designs produced in each country. Copies of the bulletin can be obtained from the Zinc Alloy Die Casters Association, 34 Berkeley Square, London WI.

#### Prestige Group Ltd

Platers & Stampers Ltd announces that the company's name has now been changed to 'The Prestige Group Ltd'. The principal reason for this change, state the directors, is that they feel the company's name should now include its trade mark 'Prestige'.

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#### **New Royal Arms**

The official design of the Royal Arms for use by the Stationery Office has been changed a number of times since an approved pattern was first introduced in 1902. On the whole the changes have tended in the direction of greater simplicity (and nicer manners in the lion and unicorn) though the 1902 design had more clarity than those of 1910 and 1011.

Now the familiar Kruger Gray design below, is superseded by a new version from the hand of Reynolds Stone, above, in which the only change of content is the use of St Edward's instead of the Tudor crown; but the character of the device is radically altered by the omission of the flecked background and a general freeing of the whole design from the straight-lacing which forced it into a rectangular shape.

The result, while admirably vigorous, is more graceful and decorative than its predecessor, a clear merit in a device which, however official, is, in the words of the Treasury committee whose work culminated in the design by Kruger Gray, "typographically... in the nature of an ornament." It is beautifully clear and will show to particular advantage in the smaller sizes as a consequence of a handsome increase in the width of the Garter and scroll, and in the size of lettering used on them, for which much clearer characters have been designed. The improvement in the manners of the lion and unicorn continues. ROBERT GOODDEN



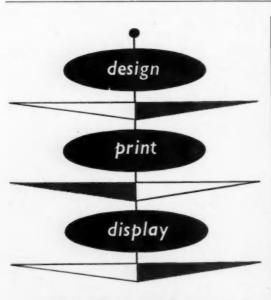


The Olympian Office Suite. A 5' 0" concave fronted desk in Pink Nigerian Pearwood having inset top and plinths in Powder blue cowhide.

Matching chair in dual tone hides. Feet and airspace supports in satin brass.

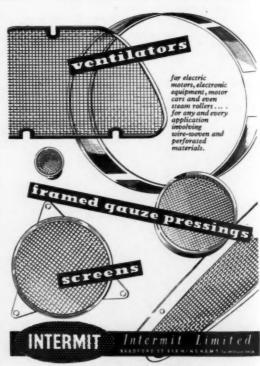
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#### More thought for food

In accordance with the design policy described in last month's issue of the magazine (DESIGN June pages 20 – 23), J. Lyons & Co Ltd has recently opened three more specialised restaurants – the 'Grill and Cheese' and the 'Bacon and Egg' at its Marble Arch Corner House, and the 'Exeter Room' at the Strand Palace Hotel.

In the new 'Grill and Cheese' (above right), designers have aimed to create a sense of quiet that is all too rare in London restau-

rants. Muted browns, yellows and black form the general colour scheme; the walls are panelled with slotted beech wood packed behind with sound absorbing glass wool, and the carpet has an underlay of foam rubber. The 'Bacon and Egg' is more frivolous; the general colour scheme is pink and grey; the tables are covered with grey 'Warerite' and the chairs and banquettes with 'Acella', a washable plastic material. The walls are hung with prints of work by modern artists.

Historic associations with the city of Exeter decided the management to design an Exeter

Room (above left) in the Strand Palace Hotel. The hotel is built on the site of Exeter House, the home of Thomas Cecil, first Earl of Exeter; Exeter Exchange and later Exeter Hall were then built on this site. Various symbols of the city's history decorate the pillars and walls, and the room is dominated by four large hand coloured murals of Exeter scenes, specially prepared by the Autotype Co Ltd. The walls are panelled in walnut and sycamore and the ceiling is covered with acoustic tiles. The décor was by C. H. Haggis of Holland & Hannen and Cubits Ltd.

# Letters

#### 'Street Furniture'

SIR: Much as I admire the lampposts approved by Mr George Williams and the CoID in the article on street furniture (DESIGN April pages 27-32) I must remind you that the primary purpose of any lampstandard is to give light. The design of the posts, although important, is only a secondary problem.

I would go so far as to say that any lamppost with a sodium light is inferior to any lamppost with fluorescent tubes. My reason for this contention is that sodium lights create glare and dark inky patches in the road, intensify fog, and annoy both pedestrians and motorists by destroying all colours and turning everything into a series of greys. Fluorescent tubes have none of these disadvantages and create an excellent light for all road users.

I would therefore say that although Paddington may have in parts beautifully designed lampposts, Holborn and Westminster win my support with well designed lamps, in spite of the fact that the design of their posts is poor. I consider that while Holborn and Westminster have well designed lights with bad styling, Paddington and some other boroughs have badly de-

signed lights, with good styling laid on top. I believe that the CoID has always decried 'styling'. Why does it not do so now?

CHRISTOPHER FOSS 60 Corringham Road London NWII We asked J. M. Waldram, president, Association of Public Lighting Engineers, to comment on Mr Foss' letter:

"Your correspondent rightly points out that the primary function of street lighting equipment is to light the street. It has to satisfy, in fact, very many requirements relating to illuminating engineering, to mechanical strength, maintenance and economics as well as the aesthetic requirements, and we have to make the best compromise we can. Everyone wants to make equipment which will look as elegant and suitable as possible; we shall probably achieve the best results when all the critics understand as much as possible of the other man's problems. Engineers are always having to make compromises; but aesthetics are outside their ken, and it is a relief to have the imprimatur of the CoID on certain designs. This does not stop the argument, but it keeps us out of it.

"It is interesting to note your correspondent's dislike of sodium lighting. In this he differs from the majority of road users, who express a preference for sodium above some other illuminants, as recent enquiries have shown. The reasons for this are not simple, and are being studied at the present time. We all tend, as your correspondent has done, to attribute all the virtues and vices of an installation to its most obvious characteristic, usually the colour of the light: in fact, of the vices which he has mentioned, the only one which properly is the fault of the sodium lamp is the distortion of colours. The others, when they occur, are due to other things, and their mechanisms are well known. The advantages of sodium lamps are that the equipment used is smaller and installation is cheaper and technically more efficient than is possible with other lamps; these are the main reasons for their adoption; another reason is that, curiously enough, people like them."

#### New scope for design

SIR: Until now, visual design has been directed exclusively to the end products of industry. The designer has participated in production techniques only in so far as has been necessary to exercise control over the appearance of the end product. He is concerned, primarily, not with production but with saleability. Meanwhile, the technique of industrial production becomes increasingly complex. The development of automation, for example, raises entirely new problems – in technique, in the training of personnel, in administration.

The potential contribution of visual design to sheer industrial efficiency has yet to be exploited. Enough has been done to indicate that a considerable field exists: in ergonomics (design of the working environment); in the design of production charts and control systems; in the development of colour codes for many purposes; in the use of block models in planning a production sequence, and the employment of diagrams for an almost limitless range of applications.

All these methods have been developed, up to a point, by engineers, or statisticians, or other specialists who are not specifically trained in the techniques of visual presentation. Concerned primarily with planning and organisation, they have used visual means simply as a tool, but sufficiently to demonstrate its value. The industrial designer, on the other hand, employs visual means as his natural mode of expression and is thus qualified to do so most effectively.

continued on page 54

In the present drive to train industrial technicians on an increasing scale, the scope for visual design as a factor in productive efficiency ought surely to be recognised.

NORBERT DUTTON 26 Beecroft Road London SE4

### Books

Aria d'Italia, Gio Ponti, Edizioni Daria Guarnati, Alec Tiranti Ltd, 54s Any selection of the work of Gio Ponti is

bound to interest.

This latest volume in the series 'Aria d'Italia' is devoted to a selection ".... so as to identify the figure of a man whose work is still in constant development in a continuity of expression".

Painter, architect, writer, teacher: the scope of Ponti's talents and activities is very wide. His influence as founder and director of 'Domus' is important, but that is only one aspect of his virtuosity. The work represented includes a wide range of industrial design over many years - furniture, fittings, interiors; also, reproduced in colour, are some of his superb drawings for costume design for the Scala. His buildings are well represented, varying from some interesting small houses to projects for a variety of buildings in Italy, Sweden and Brazil. There is a fund of invention and continuity in all the work of Gio Ponti which is very personal, but in the design of many of his larger buildings the effect seems contrived. We are content to laud narrower talents in these days of specialisation, and it is a pleasure to study this tribute to a man of such wide achievements. ERIC LYONS

Masterpieces of Greek Drawing and Painting, Ernest Pfuhl, translated by J. D. Beazley, Chatto & Windus, 63s.

The majority of the 160 illustrations in this book are from Greek vase paintings, and demonstrate the Greeks' superb mastery of using the human form as ceramic decoration.

It is difficult, in this day of intense scientific and technical research, to ap preciate the comparative lack of interest by the Greeks in ceramic materials and decorating techniques. Only masters of the known world, sure in their faith and philosophy, could have made improvement and perfection of traditional ceramic methods their guiding star. As we can see in this book, there were only three major changes in decorating techniques in 500 years. How times have changed! The industrial ceramic designer of today is faced with entirely different problems. A bigger world has to be satisfied. The industrial team has superseded the individual. A thousand cultures have had their say, and in varying degrees national ways of living demand that their needs shall be satisfied.

Fashion now changes at yearly intervals: the 'A' line, the 'H' line and so on. The prewar 'modernistic' has been overthrown by the 'contemporary'. Yet, to meet the needs of all, and still be true to himself, is the problem of the present-day designer. Through all this striving for everyone's 'brave new world' is the thread of the Grecian heritage, the classic tradition that means so much to us all.

It is refreshing to browse quietly through this beautifully produced book with its superb illustrations, to read the commentary and take heart by going back to the beginning to catch the vital spark of original truth.

It is a recognised formula with the potters that at no matter what stage things go wrong, it is always best to go back to the mill and check the quality of your raw materials. Maybe the Grecian potters and present-day ceramists are not too far apart after all.

Colour and Pattern in Your Home, Margaret Llewellyn, Co-operative Union and the Council of Industrial Design, 18 Plan Your Own Home Decoration, H. Dalton Clifford, Country Life, 158

The first of these books which have recently been added to the sizeable literature of interior decoration, is a compact and well produced paperback, and has a sound, though occasionally faux-naif approach. Being addressed mainly to those who do their own decorating, the schemes are simple and inexpensive, with emphasis on large masses of pleasant colour, and painted rather than papered walls. Though the book contains

many examples and a minimum of theory, the importance of devising one's own schemes is stressed, and there are uncoloured line drawings for the reader to experiment with.

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By contrast, Mr Dalton Clifford's larger book is nearly all theory. The author has assembled all the old friends and has added many of his own. Some of these seem doubtful: "dark gloss paint can be used instead of a mirror to give the impression that the room continues beyond the wall-surface", or that "apart from improvements in upholstery, it is difficult to see what progress has been made in furniture design in the last two hundred years".

Mr Clifford inclines towards dogmatism and unhelpful abstraction. But he has included nearly every factor needed when designing a scheme. In fact, the book's very detail is likely to reduce its usefulness to the non-professional for whom it is intended. Like its over decorated title page, the book is too full, as the author, seems to have realised in the last chapter, and it may well frighten the beginner more than it encourages him.

\*\*WALTER GUNDREY

#### **DESIGN May**

Page 54: the table lamp (no 41) was produced by Oswald Hollman Ltd, and not by Geni Products Ltd, as stated; page 61: the textile 'Palmas' produced by Tibor Ltd has a printed design by Sheila Pickersgill on a

#### Nautical showroom in Glasgow

This illustration shows part of the interior of Kelvin Hughes showroom in Glagow, which has recently been redesigned by John Lansdell. Displays of various types of instruments are ranged round the walls, and below the panels displaying clocks, barometers and chart instruments is a store cupboard forming a wide counter where customers can examine charts. The colour scheme and lighting in the showroom have been designed to emphasise the

individual displays, and the general decoration is quiet. The rather sombre grey-green floor covering is enlivened by a gay compass design near the entrance in brightly coloured inlaid linoleum. The building occupies a corner site, and before redesign had large windows on a curved frontage. The designer has retained these, but has relieved the rather dour and forbidding granite of the exterior with a façade of oiled mahogany. This is fixed to a wooden frame with copper nails, and gives the building a maritime air.



woven fabric designed by Tibor Reich; page 63: the 'Genoese' Axminster body carpet, produced by John Crossley & Sons Ltd was designed by Peter McGowan. DESIGN June page 49: 'Cobex' is manufactured by BX Plastics Ltd, and not by British Geon Ltd.

#### **Martins Bank Ltd**

The following contractors and subcontractors were responsible for carrying out Martins Bank Ltd redesign policy (pages 22-27):

Garrick Street branch: Architect, Sir Hugh Casson. Associate architect, R. A. Green. General contractor, Mullen &

Lumsden Ltd.

Sub-contractors: Facings: Anselm Odling & Sons Ltd. Strong room installation: The Chatwood Safe & Engineering Co Ltd. Night safe installation: Chubb & Son's Lock and Safe Co Ltd. Electrical installation: S. Goodchild. Heating installation: G. N. Haden & Sons Ltd. Hoist: George Johnson Ltd. Flooring in banking hall: Korkoid Decorative Floors Ltd. Shop fitting: H. H. Martyn & Co Ltd. Light fittings: The Merchant Adventurers Ltd. Gas installation: North Thames Gas Board. Casements: Williams & Williams Ltd. Suspended ceiling: The Merchant Trading Co Ltd. Sanitary fittings: W. N. Froy & Sons. Electric clocks: Baume & Co Ltd. Grille: designer Geoffrey Clarke, maker G. Johnson Bros Ltd. Soft furnishings: Catesbys Contracts & Exports Ltd.

Tottenham Court Road branch: Architects, Bridgwater & Shepheard. Contractors, Mullen & Lumsden Ltd. Sculpture over door: designer Christopher Ironside, maker Comyn Ching & Co Ltd. Tapestry: de-

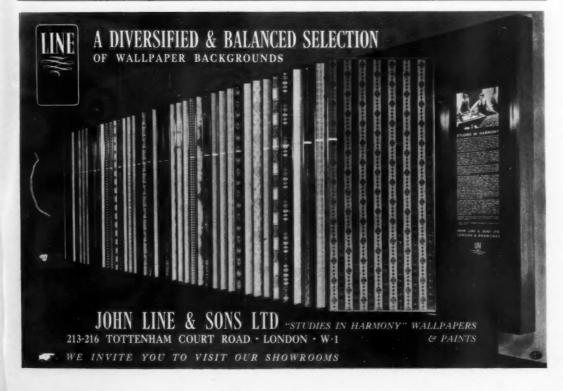
signers Peter Shepheard and Sax Shaw. Furniture: chairs, Hille of London Ltd, curtains and carpet, Heal & Sons Ltd.

Sub-contractors: Banking hall fittings and panelling: Mullen & Lumsden Ltd. Hot water services, heating and ventilation: Ellis (Kensington) Ltd. Electricity: Troughton & Young Ltd. Metalwork: The Birmingham Guild. Ceiling: G. Jackson & Sons Ltd. Marble work: Whitehead & Sons Ltd. Glass: London Sand Blast Decorative Glass Works Ltd. Floor in clerks' space: Korkoid Decorative Floors Ltd. Metal windows: Henry Hope & Sons Ltd. Strong room: The Chatwood Safe & Engineering Co Ltd. Ironmongery: Comyn Ching & Co Ltd. Venetian blinds: Deans Blinds Ltd. Lift: Hammond & Champness Ltd. Lettering: The Lettering Centre. Wood supplies: William Mallinson & Sons Ltd. Asphalt floor in basement: General Asphalte Co Ltd. Paint: Thomas Parsons & Sons Ltd. Clocks: Synchronome Co Ltd. Golders Green branch: Architects, Bridgwater & Shepheard. Assistant architects, Gordon Michell, G. West. General

contractor, Mullen & Lumsden Ltd. Sub-contractors: Dampcourses, asphalt: The General Asphalte Co Ltd. Stone, marble work, decorative flooring: J. Whitehead & Sons Ltd. Structural steel: British Reinforced Concrete Co Ltd. Central heating, boilers: Richard Crittall & Co Ltd. Gasfitting: North Thames Gas Board. Electric wiring and electric light fixtures: Drake & Gorham Ltd. Plumbing: W. H. Gascoigne & Co Ltd. Sanitary fittings: J. Bolding & Sons Ltd. Door furniture: Comyn Ching & Co Ltd, N. F. Ramsay & Co Ltd; G. Jackson & Sons Ltd. Fibrous plaster: G. Jackson & Sons Ltd. Balustrades, fire escape stairs: Frederick Braby & Co Ltd. Bank fittings (joinery): Shapland & Petter Ltd. Wallpapers: Cole & Son (Wallpapers) Ltd. Furniture, chairs: L. M. Furniture Ltd: Heal & Sons Ltd. Clocks: Gent & Co Ltd. Windows and patent glazing: Henry Hope & Sons Ltd. Patent flooring: Korkoid Decorative Flooring; J. Whitehead & Sons Ltd.

#### Designers in this issue

Peter Ashen (28). Otl Aicher (44). J. M. Barnicot MSIA (14). Milo Baughman (39). Arthur N. Becvar (41, 47). Erich Beisl (17). Harry Bertoia (38). Benesch/Arnold (39). Max Bill (43, 44). Bridgwater & Shepheard (26). Barbara Brown (28). Sir Hugh Casson, RDI, MA, FRIBA, FSIA (26, 29, 55). Geoffrey Clarke, ARCA (22, 26, 55). Eric G. Clements, DesRCA, MSIA (36, 37). Alan R. Cripe (47). John Drummond (28). D. W. Durrant (45). Norbert Dutton, PSIA (53). Christopher Foss, LSIA (53). Kenneth Garland CATI Editor). Robert Goodden, CBE, RDI, ARIBA, FSIA (51). Walter C. Granville (47). Hans Gugelot (43). C. H. Haggis (53). Richard Hamilton (45). Iris Hemmings (29). Sally Holliday (22, 26). C. Ironside, MSIA (25, 26, 55). R. Ironside (25, 26). Gwenfred Jarvis (30). Finn Juhl (40). Florence Knoll (40). John Lansdell, FRSA, MSIA (54). Mary Lawrence (29). Louis Le Brocquy (28). Margaret Leischner, FSIA (30). Eric Lyons, FRIBA, MSIA (54). James Maguire (30). Paul McCobb (40). Ernst Möckl (44). Jean Nicol (28). Beverley Pick, FSIA (17). Lucie Rie (21). John Reid, ARIBA, MSIA, FRSA (14). Pamela Robinson (28). H. A. Rothholz, MSIA (45). Sax Shaw (24, 26, 55). A. H. Shearing, ARIBA (28). Peter Shepheard, ARIBA (26, 55). Harry Sherwood, FRIBA (26). Otto Schild (44). Richard Schultz (40). Victor Skellern, FSIA (54). Alison and Peter Smithson, A/ARIBA (38). Reynolds Stone (51). Sir Alliott Verdon Roe (33, 35). Friedrich Vordemberge-Gildwart (44). Professor Wilhelm Wagenfeld (17). Westwood Sons & Harrison (26). Frank Lloyd Wright (38). Walter Zeischegg (43).



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1st January 1957.

E. L. RUSSELL Chief Education Officer

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